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PTO/SB/05 (2/98)
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# UTILITY PATENT APPLICATION TRANSMITTAL

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

| | |
|---|---|
| Attorney Docket No. | 38-21(15878)B |
| First Named Inventor or Application Identifier | ANDERSEN |
| Title | Nucleic Acid Molecules and Other Molecules Associated with Plants |
| Express Mail Label No. | |

## APPLICATION ELEMENTS

*See MPEP chapter 600 concerning utility patent application contents*

***ADDRESS TO:*** Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. [X] *Fee Transmittal Form (Form PTO-1082)
*(Submit an original and a duplicate for fee processing)*

2. [X] Specification [*Total Pages* 79 ]
*(preferred arrangement set forth below)*
- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R&D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claims
- Abstract of the Disclosure

3. [ ] Drawing(s) *(35 USC 113)* [*Total Sheets* ]

4. Oath or Declaration [*Total Pages* 9 ]
a. [X] Newly executed (original or copy)
b. [ ] Copy from a prior application (37 CFR 1.63(d))
*(for continuation/divisional with Box 17 completed)*
***[Note Box 5 below]***
i. [ ] DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

5. [ ] Incorporation By Reference *(useable if Box 4b is checked)*
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. [ ] Microfiche Computer Program *(Appendix)*

7. Nucleotide and/or Amino Acid Sequence Submission
*(if applicable, all necessary)*
a. [X] Computer Readable Copy
b. [X] Paper Copy (identical to computer copy)
c. [X] Statement verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

8. [ ] Assignment Papers (cover sheet & document(s))
9. [ ] 37 CFR 3.73(b) Statement *(when there is an assignee)* [ ] Power of Attorney
10. [ ] English Translation Document *(if applicable)*
11. [X] Information Disclosure Statement (IDS)/PTO-1449 [X] Copies of IDS Citations
12. [ ] Preliminary Amendment
13. [X] Return Receipt Postcard (MPEP 503) (Two)
*(should be specifically itemized)*
14. [ ] *Small Entity Statement(s) [ ] Statement filed in prior application, Status still proper and desired
15. [ ] Certified Copy of Priority Document(s)
*(if foreign priority is claimed)*
16. [ ] Other:

*NOTE FOR ITEMS 1 & 14 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

17. **If a CONTINUING APPLICATION**, *check appropriate box and supply the requisite information:*
[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No: /
Prior Application Information: Examiner: Group/Art Unit:

## 18. CORRESPONDENCE ADDRESS

[ ] *Customer Number or Bar Code Label* *or* [X] *Correspondence address below*
*(Insert Customer No. or Attach bar code label here)*

| | | | | | |
|---|---|---|---|---|---|
| *NAME* | Lawrence M. Lavin, Jr., Esq. | | | | |
| | Monsanto Company | | | | |
| *ADDRESS* | Patent Department, E2NA | | | | |
| | 800 N. Lindbergh Boulevard | | | | |
| *CITY* | St. Louis | *STATE* | Missouri | *ZIP CODE* | 63167 |
| *COUNTRY* | US | *TELEPHONE* | (314) 694-3602 | *FAX* | (314) 694-1671 |

| | | | | | |
|---|---|---|---|---|---|
| *Name (Print/Type)* | Lawrence M. Lavin, Jr. | *Registration No. (Attorney/Agent)* | 30,768 | | |
| *Signature* | Lawrence M. Lavin, Jr. by David R. Marsh (Reg. No. 41,408) | *Date* | June 15, 2000 | | |

Burden Hour Statement This form is estimated to take 0.2 hours to complete Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

by David R. Marsh

FORM PTO-1082

**Patent Department, E2NA**
**MONSANTO COMPANY**
**800 N. Lindbergh Boulevard**
**St. Louis, MO 63167**
**(314) 694-3602**

jc803 U.S. PTO
09/594596
06/15/00

Attorney Docket No. 38-21(15878)B

ASSISTANT COMMISSIONER FOR PATENTS
Washington, DC 20231

Sir:

Transmitted herewith for filing is the patent application of

Inventors: Scott E. ANDERSEN *et al.*
For: Nucleic Acid Molecules and Other Molecules Associated with Plants

Enclosed are:

- ☐ A certified copy of a _____ application.
- ☐ A verified statement to establish small entity status under 37 C.F.R. § 1.9 and 37 C.F.R. § 1.27.
- ☒ Executed Combined Declaration and Power of Attorney for Patent Application (9 total pages).

The filing fee has been calculated as shown below:

| | (Col. 1) | (Col. 2) |
|---|---|---|
| FOR | NO. FILED | NO. EXTRA |
| BASIC FEE | | |
| TOTAL CLAIMS | 9 - 20 = | * 0 |
| INDEP. CLAIMS | 3 - 3 = | * 0 |
| ☐ MULTIPLE DEPENDENT CLAIM PRESENTED | | |

*If the difference in Col. 1 is less than zero, enter "0" in Col. 2

| SMALL ENTITY | | | OTHER THAN A SMALL ENTITY | |
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| RATE | FEE | OR | RATE | FEE |
| | 345.00 | OR | | 690.00 |
| x 9 = | | OR | x 18 = | 0.00 |
| x 39 = | | OR | x 78 = | 0.00 |
| + 130 = | | OR | + 260 = | |
| TOTAL | $ | OR | TOTAL | $ 690.00 |

- ☐ Please charge my Deposit Account No. 13-4125 in the amount of _____. A duplicate copy of this sheet is attached.
- ☒ Check No. 329850 in the amount of $ 690.00 to cover the filing fee is enclosed.
- ☒ The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 13-4125 referencing docket number 38-21(15878)B. A duplicate copy of this sheet is attached.
  - ☒ Any additional filing fees required under 37 C.F.R. § 1.16.
  - ☒ Any patent application processing fees under 37 C.F.R. § 1.17.
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  - ☐ Any patent application processing fees under 37 C.F.R. § 1.17.
  - ☐ The issue fee set in 37 C.F.R. § 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b).
  - ☐ Any filing fees under 37 C.F.R. § 1.16 for presentation of extra claims.

Date: June 15, 2000

Lawrence M. Lavin, Jr.

Lawrence M. Lavin, Jr. (Reg. No. 30,768)
by David R. Marsh (Reg. No. 41,408)

by David R. Marsh

HOWREY SIMON ARNOLD & WHITE HOWREY LLP
ATTORNEYS AT LAW

1299 PENNSYLVANIA AVE., NW
WASHINGTON, DC 20004-2402
PHONE 202.783.0800
FAX 202.383.6610
A LIMITED LIABILITY PARTNERSHIP

06/15/00 jc803 U.S. PTO
jc803 U.S. PTO 09/594596 06/15/00

June 15, 2000

***Box Patent Application***

Assistant Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Non-Provisional Utility Patent Application
Application No.: To Be Assigned
Filed: Herewith
For: **Nucleic Acid Molecules and Other Molecules Associated with Plants**
Inventors: Scott E. ANDERSEN *et al.*
Atty. Docket: 38-21(15878)B

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. Utility Patent Application Transmittal (PTO/SB/05);

2. Form PTO-1082 (in duplicate);

3. U.S. Utility Patent Application entitled:

**Nucleic Acid Molecules and Other Molecules Associated with Plants**

and naming as inventors:

**Scott E. ANDERSEN, Joseph R. BYRUM, and Robert C. DE LA PENA,**

the application consisting of:

a. A specification containing:

(i) 77 pages of a description prior to the claims;

(ii) 1 page of claims (9 claims);

(iii) a one (1) page abstract; and

(iv) 4,541 pages of a sequence listing;

The PTO did not receive the following listed item(s) _____

4. Statement Regarding Sequence Submission;

5. A CD-ROM containing the sequence listing;

6. Combined Declaration and Power of Attorney for Patent Application, executed by inventor Scott E. ANDERSEN (3 pages);

7. Combined Declaration and Power of Attorney for Patent Application, executed by inventor Joseph R. BYRUM (3 pages);

8. Combined Declaration and Power of Attorney for Patent Application, executed by inventor Robert C. DE LA PENA (3 pages);

9. An Information Disclosure Statement;

10. Form PTO-1449 (1 page), with 8 accompanying documents;

11. Our Check No. 329850 in the amount of $690.00 to cover the basic filing fee; and

12. Two (2) return postcards.

**To facilitate the processing of the accompanying application, the CD-ROM containing the sequence listing can be located in Box 1. In addition, again to facilitate processing of the accompanying application, the pages setting forth the claims can also be found in Box 1.**

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

In accordance with 37 C.F.R. § 1.821(f), the paper copy of the sequence listing and the computer readable copy of the sequence listing submitted herewith in the above application are the same.

Respectfully submitted,

David R. Marsh (Reg. No. 41,408)

Enclosures

# NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH PLANTS

## Field of the Invention

The present invention is in the field of plant biochemistry. More specifically the invention relates to nucleic acid molecules that encode proteins and fragments of proteins produced in plant cells, in particular, wheat plants. The invention also relates to proteins and fragments of proteins so encoded and antibodies capable of binding the proteins. The invention also relates to methods of using the nucleic acid molecules, proteins and fragments of proteins.

## Background of the Invention

### I. EXPRESSED SEQUENCE TAG NUCLEIC ACID MOLECULES

Expressed sequence tags, or ESTs, are short sequences of randomly selected clones from a cDNA (or complementary DNA) library which are representative of the cDNA inserts of these randomly selected clones. McCombie, *et al., Nature Genetics, 1:*124-130 (1992); Kurata, *et al., Nature Genetics, 8:* 365-372 (1994); Okubo, *et al., Nature Genetics, 2:* 173-179 (1992), all of which references are incorporated herein in their entirety.

Using conventional methodologies, cDNA libraries can be constructed from the mRNA (messenger RNA) of a given tissue or organism using poly dT primers and reverse transcriptase (Efstratiadis, *et al.*, *Cell 7*:279-288 (1976), the entirety of which is herein incorporated by reference; Higuchi, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 73*:3146-3150 (1976), the entirety of which is herein incorporated by reference; Maniatis, *et al.*, *Cell 8*:163 (1976) the entirety of which is herein incorporated by reference; Land, *et al.*, *Nucleic Acids Res. 9*:2251-2266 (1981), the entirety of which is herein incorporated by reference; Okayama, *et al.*, *Mol. Cell. Biol. 2*:161-170 (1982), the entirety of which is herein incorporated by reference; Gubler, *et al.*, *Gene 25*:263 (1983), the entirety of which is herein incorporated by reference).

Several methods may be employed to obtain full-length cDNA constructs. For example, terminal transferase can be used to add homopolymeric tails of dC residues to the free 3' hydroxyl groups (Land, *et al.*, *Nucleic Acids Res. 9*:2251-2266 (1981), the entirety of which is herein incorporated by reference). This tail can then be hybridized by a poly dG oligo which can act as a primer for the synthesis of full length second strand cDNA. Okayama and Berg, report a method for obtaining full length cDNA constructs. This method has been simplified by using synthetic primer-adapters that have both homopolymeric tails for priming the synthesis of the first and second strands and restriction sites for cloning into plasmids (Coleclough, *et al.*, *Gene 34*:305-314 (1985), the entirety of which is herein incorporated by reference) and bacteriophage vectors (Krawinkel, *et al.*, *Nucleic Acids Res. 14*:1913 (1986), the entirety of which is herein incorporated by reference; and Han, *et al.*, *Nucleic Acids Res. 15*:6304 (1987), the entirety of which is herein incorporated by reference).

These strategies have been coupled with additional strategies for isolating rare mRNA populations. For example, a typical mammalian cell contains between 10,000 and 30,000 different mRNA sequences. Davidson, *Gene Activity in Early Development*, 2nd ed., Academic Press, New York (1976). The number of clones required to achieve a given probability that a low-abundance mRNA will be present in a cDNA library is N = (ln(1-P))/(ln(1-1/n)) where N is the number of clones required, P is the probability desired, and 1/n is the fractional proportion of the total mRNA that is represented by a single rare mRNA. (Sambrook, *et al.*, *Molecular Cloning: A Laboratory Manual*, 2nd ed., Cold Spring Harbor Laboratory Press (1989), the entirety of which is herein incorporated by reference.).

A method to enrich preparations of mRNA for sequences of interest is to fractionate by size. One such method is to fractionate by electrophoresis through an agarose gel (Pennica, *et al.*, *Nature 301*:214-221 (1983), the entirety of which is herein incorporated by reference). Another such method employs sucrose gradient centrifugation in the presence of an agent, such as methylmercuric hydroxide, that denatures secondary structure in RNA (Schweinfest, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 79*:4997-5000 (1982), the entirety of which is herein incorporated by reference).

A frequently adopted method is to construct equalized or normalized cDNA libraries (Ko, *Nucleic Acids Res. 18*:5705-5711 (1990), the entirety of which is herein incorporated by

reference; Patanjali, S. R. *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 88*:1943-1947 (1991), the entirety of which is herein incorporated by reference). Typically, the cDNA population is normalized by subtractive hybridization. Schmid, *et al.*, *J. Neurochem. 48*:307-312 (1987) the entirety of which is herein incorporated by reference; Fargnoli, *et al.*, *Anal. Biochem. 187*:364-373 (1990) the entirety of which is herein incorporated by reference; Travis, *et al.*, *Proc. Natl. Acad. Sci (U.S.A.) 85*:1696-1700 (1988) the entirety of which is herein incorporated by reference; Kato, *Eur. J. Neurosci. 2*:704 (1990); and Schweinfest, *et al.*, *Genet. Anal. Tech. Appl. 7*:64 (1990), the entirety of which is herein incorporated by reference). Subtraction represents another method for reducing the population of certain sequences in the cDNA library. Swaroop, *et al.*, *Nucleic Acids Res. 19*:1954 (1991), the entirety of which is herein incorporated by reference).

ESTs can be sequenced by a number of methods. Two basic methods may be used for DNA sequencing, the chain termination method of Sanger *et al., Proc. Natl. Acad. Sci. (U.S.A.) 74:* 5463-5467 (1977), the entirety of which is herein incorporated by reference and the chemical degradation method of Maxam and Gilbert, *Proc. Nat. Acad. Sci. (U.S.A.) 74:* 560-564 (1977), the entirety of which is herein incorporated by reference. Automation and advances in technology such as the replacement of radioisotopes with fluorescence-based sequencing have reduced the effort required to sequence DNA (Craxton, *Methods, 2:* 20-26 (1991), the entirety of which is herein incorporated by reference; Ju *et al., Proc. Natl. Acad. Sci. (U.S.A.) 92:* 4347-4351 (1995), the entirety of which is herein incorporated by reference; Tabor and Richardson, *Proc. Natl. Acad. Sci. (U.S.A.) 92:* 6339-6343 (1995), the entirety of which is herein incorporated by reference). Automated sequencers are available from, for example, Pharmacia Biotech, Inc., Piscataway, New Jersey (Pharmacia ALF), LI-COR, Inc., Lincoln, Nebraska (LI-COR 4,000) and Millipore, Bedford, Massachusetts (Millipore BaseStation).

In addition, advances in capillary gel electrophoresis have also reduced the effort required to sequence DNA and such advances provide a rapid high resolution approach for sequencing DNA samples (Swerdlow and Gesteland, *Nucleic Acids Res. 18*:1415-1419 (1990); Smith, *Nature 349*:812-813 (1991); Luckey *et al.*, *Methods Enzymol. 218*:154-172 (1993); Lu *et al.*, *J. Chromatog. A. 680*:497-501 (1994); Carson *et al.*, *Anal. Chem. 65*:3219-

3226 (1993); Huang *et al.*, *Anal. Chem. 64*:2149-2154 (1992); Kheterpal *et al.*, *Electrophoresis 17*:1852-1859 (1996); Quesada and Zhang, *Electrophoresis 17*:1841-1851 (1996); Baba, *Yakugaku Zasshi 117*:265-281 (1997), all of which are herein incorporated by reference in their entirety).

ESTs longer than 150 bases have been found to be useful for similarity searches and mapping. (Adams, *et al.*, *Science 252*:1651-1656 (1991), herein incorporated by reference.) EST sequences normally range from 150-450 bases. This is the length of sequence information that is routinely and reliably generated using single run sequence data. Typically, only single run sequence data is obtained from the cDNA library, Adams, *et al.*, *Science 252*:1651-1656 (1991). Automated single run sequencing typically results in an approximately 2-3% error or base ambiguity rate. (Boguski, *et al.*, *Nature Genetics, 4*:332-333 (1993), the entirety of which is herein incorporated by reference).

EST databases have been constructed or partially constructed from, for example, *C. elegans* (McCombrie, *et al.*, *Nature Genetics 1*:124-131 (1992), human liver cell line HepG2 (Okubo, *et al.*, *Nature Genetics 2*:173-179 (1992)), human brain RNA (Adams, *et al.*, *Science 252*:1651-1656 (1991); Adams, *et al.*, *Nature 355*:632-635 (1992)), *Arabidopsis,* (Newman, *et al.*, *Plant Physiol.* 106:1241-1255 (1994)); and rice (Kurata, *et al.*, *Nature Genetics 8*:365-372 (1994).

## II. SEQUENCE COMPARISONS

A characteristic feature of a protein or DNA sequence is that it can be compared with other known protein or DNA sequences. Sequence comparisons can be undertaken by determining the similarity of the test or query sequence with sequences in publicly available or propriety databases ("similarity analysis") or by searching for certain motifs ("intrinsic sequence analysis")(e.g. *cis* elements)(Coulson, *Trends in Biotechnology, 12:* 76-80 (1994), the entirety of which is herein incorporated by reference; Birren, *et al., Genome Analysis, 1*: 543-559 (1997), the entirety of which is herein incorporated by reference).

Similarity analysis includes database search and alignment. Examples of public databases include the DNA Database of Japan (DDBJ)(http://www.ddbj.nig.ac.jp/); Genebank (http://www.ncbi.nlm.nih.gov/web/Genbank/Index.htlm); and the European Molecular

Biology Laboratory Nucleic Acid Sequence Database (EMBL) (http://www.ebi.ac.uk/ebi_docs/embl_db.html). A number of different search algorithms have been developed, one example of which are the suite of programs referred to as BLAST programs. There are five implementations of BLAST, three designed for nucleotide sequences queries (BLASTN, BLASTX, and TBLASTX) and two designed for protein sequence queries (BLASTP and TBLASTN) (Coulson, *Trends in Biotechnology, 12:* 76-80 (1994); Birren, *et al., Genome Analysis, 1:* 543-559 (1997)).

BLASTN takes a nucleotide sequence (the query sequence) and its reverse complement and searches them against a nucleotide sequence database. BLASTN was designed for speed, not maximum sensitivity, and may not find distantly related coding sequences. BLASTX takes a nucleotide sequence, translates it in three forward reading frames and three reverse complement reading frames, and then compares the six translations against a protein sequence database. BLASTX is useful for sensitive analysis of preliminary (single-pass) sequence data and is tolerant of sequencing errors (Gish and States, *Nature Genetics, 3:* 266-272 (1993), the entirety of which is herein incorporated by reference). BLASTN and BLASTX may be used in concert for analyzing EST data (Coulson, *Trends in Biotechnology, 12:* 76-80 (1994); Birren, *et al., Genome Analysis, 1:* 543-559 (1997).

Given a coding nucleotide sequence and the protein it encodes, it is often preferable to use the protein as the query sequence to search a database because of the greatly increased sensitivity to detect more subtle relationships. This is due to the larger alphabet of proteins (20 amino acids) compared with the alphabet of nucleic acid sequences (4 bases), where it is far easier to obtain a match by chance. In addition, with nucleotide alignments, only a match (positive score) or a mismatch (negative score) is obtained, but with proteins, the presence of conservative amino acid substitutions can be taken into account. Here, a mismatch may yield a positive score if the non-identical residue has physical/chemical properties similar to the one it replaced. Various scoring matrices are used to supply the substitution scores of all possible amino acid pairs. A general purpose scoring system is the BLOSUM62 matrix (Henikoff and Henikoff, *Proteins, 17:* 49-61 (1993), the entirety of which is herein incorporated by reference), which is currently the default choice for BLAST programs. BLOSUM62 is tailored for alignments of moderately diverged sequences and thus may not yield the best

results under all conditions. Altschul, *J. Mol. Biol. 36:* 290-300 (1993), the entirety of which is herein incorporated by reference, uses a combination of three matrices to cover all contingencies. This may improve sensitivity, but at the expense of slower searches. In practice, a single BLOSUM62 matrix is often used but others (PAM40 and PAM250) may be attempted when additional analysis is necessary. Low PAM matrices are directed at detecting very strong but localized sequence similarities, whereas high PAM matrices are directed at detecting long but weak alignments between very distantly related sequences.

Homologues in other organisms are available that can be used for comparative sequence analysis. Multiple alignments are performed to study similarities and differences in a group of related sequences. CLUSTAL W is a multiple sequence alignment package available that performs progressive multiple sequence alignments based on the method of Feng and Doolittle, *J. Mol. Evol.* 25: 351-360 (1987), the entirety of which is herein incorporated by reference. Each pair of sequences is aligned and the distance between each pair is calculated; from this distance matrix, a guide tree is calculated, and all of the sequences are progressively aligned based on this tree. A feature of the program is its sensitivity to the effect of gaps on the alignment; gap penalties are varied to encourage the insertion of gaps in probable loop regions instead of in the middle of structured regions. Users can specify gap penalties, choose between a number of scoring matrices, or supply their own scoring matrix for both the pairwise alignments and the multiple alignments. CLUSTAL W for UNIX and VMS systems is available at: ftp.ebi.ac.uk. Another program is MACAW (Schuler *et al.*, *Proteins, Struct. Func. Genet, 9:*180-190 (1991), the entirety of which is herein incorporated by reference, for which both Macintosh and Microsoft Windows versions are available. MACAW uses a graphical interface, provides a choice of several alignment algorithms, and is available by anonymous ftp at: ncbi.nlm.nih.gov (directory/pub/macaw).

Sequence motifs are derived from multiple alignments and can be used to examine individual sequences or an entire database for subtle patterns. With motifs, it is sometimes possible to detect distant relationships that may not be demonstrable based on comparisons of primary sequences alone. Currently, the largest collection of sequence motifs in the world is PROSITE (Bairoch and Bucher, *Nucleic Acid Research, 22:* 3583-3589 (1994), the entirety of which is herein incorporated by reference.) PROSITE may be accessed via either the ExPASy

server on the World Wide Web or anonymous ftp site. Many commercial sequence analysis packages also provide search programs that use PROSITE data.

A resource for searching protein motifs is the BLOCKS E-mail server developed by S. Henikoff, *Trends Biochem Sci., 18:*267-268 (1993), the entirety of which is herein incorporated by reference; Henikoff and Henikoff, *Nucleic Acid Research, 19:*6565-6572 (1991), the entirety of which is herein incorporated by reference; Henikoff and Henikoff, *Proteins, 17:* 49-61 (1993). BLOCKS searches a protein or nucleotide sequence against a database of protein motifs or "blocks." Blocks are defined as short, ungapped multiple alignments that represent highly conserved protein patterns. The blocks themselves are derived from entries in PROSITE as well as other sources. Either a protein or nucleotide query can be submitted to the BLOCKS server; if a nucleotide sequence is submitted, the sequence is translated in all six reading frames and motifs are sought in these conceptual translations. Once the search is completed, the server will return a ranked list of significant matches, along with an alignment of the query sequence to the matched BLOCKS entries.

Conserved protein domains can be represented by two-dimensional matrices, which measure either the frequency or probability of the occurrences of each amino acid residue and deletions or insertions in each position of the domain. This type of model, when used to search against protein databases, is sensitive and usually yields more accurate results than simple motif searches. Two popular implementations of this approach are profile searches (such as GCG program ProfileSearch) and Hidden Markov Models (HMMs)(Krough *et al., J. Mol. Biol. 235*:1501-1531 (1994); Eddy, *Current Opinion in Structural Biology 6:*361-365 (1996), both of which are herein incorporated by reference in their entirety). In both cases, a large number of common protein domains have been converted into profiles, as present in the PROSITE library, or HHM models, as in the Pfam protein domain library (Sonnhammer *et al., Proteins 28*:405-420 (1997), the entirety of which is herein incorporated by reference). Pfam contains more than 500 HMM models for enzymes, transcription factors, signal transduction molecules, and structural proteins. Protein databases can be queried with these profiles or HMM models, which will identify proteins containing the domain of interest. For example, HMMSW or HMMFS, two programs in a public domain package called HMMER (Sonnhammer *et al., Proteins 28*:405-420 (1997)) can be used.

PROSITE and BLOCKS represent collected families of protein motifs. Thus, searching these databases entails submitting a single sequence to determine whether or not that sequence is similar to the members of an established family. Programs working in the opposite direction compare a collection of sequences with individual entries in the protein databases. An example of such a program is the Motif Search Tool, or MoST (Tatusov *et al. Proc. Natl. Acad. Sci. 91:* 12091-12095 (1994), the entirety of which is herein incorporated by reference.) On the basis of an aligned set of input sequences, a weight matrix is calculated by using one of four methods (selected by the user); a weight matrix is simply a representation, position by position in an alignment, of how likely a particular amino acid will appear. The calculated weight matrix is then used to search the databases. To increase sensitivity, newly found sequences are added to the original data set, the weight matrix is recalculated, and the search is performed again. This procedure continues until no new sequences are found.

## Summary of the Invention

The present invention provides a substantially purified nucleic acid molecule that encodes a wheat protein or fragment thereof comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952.

The present invention also provides one or more substantially purified nucleic acid molecules comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof.

The present invention also provides a substantially purified wheat protein or fragment thereof, wherein said wheat protein is encoded by a nucleic acid molecule that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952.

The present invention further provides a substantially purified protein, peptide, or fragment thereof encoded by a nucleic acid sequence which specifically hybridizes to a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of a complement of SEQ ID NO: 1 through SEQ ID NO:10952.

The present invention further provides a substantially purified antibody capable of specifically binding to a protein or fragment thereof encoded by a nucleic acid sequence

which specifically hybridizes to a nucleic acid molecule having a nucleic acid sequence selected from the group consisting of a complement of SEQ ID NO:1 through SEQ ID NO:10952.

The present invention also provides a transformed plant transformed to contain a nucleic acid molecule which comprises: (A) an exogeneous promoter region which functions in plant cells to cause the production of an mRNA molecule; which is linked to (B) a structural nucleic acid molecule, wherein said structural nucleic acid molecule comprises a nucleic acid molecule that encodes a protein, peptide, or fragment thereof which hybridizes to a nucleic acid sequence selected from the group consisting of a complement of SEQ ID NO:1 through SEQ ID NO:10952 expressed in an effective amount to produce a desirable agronomic effect; which is linked to (C) a 3' non-translated sequence that functions in plant cells to cause the termination of transcription and the addition of polyadenylated ribonucleotides to the 3' end of the mRNA sequence.

The present invention also provides a transformed plant cell containing a nucleic acid molecule whose non-transcribed strand encodes a protein or fragment thereof, wherein the transcribed strand of said nucleic acid is complementary to a nucleic acid molecule that encodes a protein or fragment thereof. The present invention also provides bacterial, viral, microbial, and plant cells comprising a nucleic acid molecule of the present invention

The present invention also provides a method of producing a plant containing one or more proteins encoded by sequences comprising SEQ ID NO:1 or complement thereof through SEQ ID NO:10952 or complements thereof, expressed in a sufficient amount and/or fashion to produce a desirable agronomic effect.

In accomplishing the foregoing, there is provided, in accordance with one aspect of the present invention, methods of producing genetically transformed plants, comprising the steps of:

(a) inserting into the genome of a plant cell a recombinant, double-stranded DNA molecule comprising

(i) a promoter which functions in plant cells to cause the production of an RNA sequence,

(ii) a structural DNA sequence that causes the production of an RNA sequence which encodes a desired protein.

(iii) a 3' non-translated DNA sequence which functions in plant cells to cause the addition of polyadenylated nucleotides to the 3' end of RNA sequence; where the promoter is homologous or heterologous with respect to the coding sequence and adapted to cause sufficient expression of a protein in desired plant tissues to enhance the agronomic utility of a plant transformed with said gene.

(b) obtaining a transformed plant cell with said nucleic acid molecule that encodes one or more proteins, wherein said nucleic acid molecule is transcribed and results in expression of said protein(s); and

(c) regenerating from the transformed plant cell a genetically transformed plant

The present invention also encompasses differentiated plants, seeds, and progeny comprising said transformed plant cells and which exhibit novel properties of agronomic significance.

The present invention also provides a method of producing a plant containing reduced levels of a protein comprising: (A) transforming a plant cell with a nucleic acid molecule that encodes a protein, wherein said nucleic acid molecule is transcribed and results in co-suppression of endogenous protein synthesis activity, and (B) regenerating plants and producing subsequent progeny from the transformed plant.

The present invention also provides a method of determining an association between a polymorphism and a plant trait comprising: (A) hybridizing a nucleic acid molecule specific for a polymorphism to genetic material of a plant, wherein said nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof; and (B) calculating the degree of association between the polymorphism and the plant trait.

The present invention also provides a method of isolating a genetic region, or nucleic acid that encodes a protein or fragment thereof comprising: (A) incubating under conditions permitting nucleic acid hybridization: a marker nucleic acid molecule, preferably an EST, with a complementary nucleic acid molecule obtained from a plant cell or plant tissue; (B)

permitting hybridization between said marker nucleic acid molecule, preferably an EST, and said complementary nucleic acid molecule obtained from said plant cell or plant tissue; and (C) isolating said complementary nucleic acid molecule.

The present invention also provides a method for determining a level or pattern in a plant cell of a protein in a plant comprising: (A) incubating, under conditions permitting nucleic acid hybridization, a marker nucleic acid molecule, the marker nucleic acid molecule selected from the group of marker nucleic acid molecules which specifically hybridize to a nucleic acid molecule having the nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952 or complements thereof or fragments of either, with a complementary nucleic acid molecule obtained from the plant cell or plant tissue, wherein nucleic acid hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant cell or plant tissue permits the detection of an mRNA for the enzyme; (B) permitting hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant cell or plant tissue; and (C) detecting the level or pattern of the complementary nucleic acid, wherein the detection of the complementary nucleic acid is predictive of the level or pattern of the protein.

The present invention also provides a method for determining the level or pattern of a protein in a plant cell or plant tissue comprising: (A) incubating under conditions permitting nucleic acid hybridization: a marker nucleic acid molecule, the marker nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof, with a complementary nucleic acid molecule obtained from a plant cell or plant tissue, wherein nucleic acid hybridization between the marker nucleic acid molecule, and the complementary nucleic acid molecule obtained from the plant cell or plant tissue permits the detection of said protein; (B) permitting hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant cell or plant tissue; and (C) detecting the level or pattern of the complementary nucleic acid, wherein the detection of said complementary nucleic acid is predictive of the level or pattern of the protein synthesis.

The present invention also provides a method for determining a level or pattern of a protein in a plant cell or plant tissue which comprises assaying the concentration of a molecule, whose concentration is dependent upon the expression of a gene, the gene having a nucleic acid sequence which specifically hybridizes to a protein marker nucleic acid molecule, the molecule being present in a plant cell or plant tissue, in comparison to the concentration of that molecule present in a plant cell or plant tissue with a known level or pattern of said protein, wherein an assayed concentration of the molecule is compared to the assayed concentration of the molecule in a plant cell or plant tissue with a known level or pattern of said protein.

The present invention also provides a method of determining a mutation in a plant whose presence is predictive of a mutation affecting a level or pattern of a protein comprising the steps: (A) incubating, under conditions permitting nucleic acid hybridization, a marker nucleic acid, the marker nucleic acid selected from the group of marker nucleic acid molecules which specifically hybridize to a nucleic acid molecule consisting of the nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952 or complements thereof or fragments of either and a complementary nucleic acid molecule obtained from the plant, wherein nucleic acid hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant permits the detection of a polymorphism whose presence is predictive of a mutation affecting the level or pattern of the protein in the plant; (B) permitting hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant; and (C) detecting the presence of the polymorphism, wherein the detection of the polymorphism is predictive of the mutation.

The present invention also provides a method for determining a mutation in a plant whose presence is predictive of a mutation affecting the level or pattern of protein synthesis comprising the steps: (A) incubating under conditions permitting nucleic acid hybridization: a marker nucleic acid molecule, the marker nucleic acid molecule comprising a nucleic acid molecule that is linked to gene, the gene having a nucleic acid sequence which specifically hybridizes to a sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO:10952 and complements thereof, and a complementary nucleic acid molecule obtained

from a plant tissue or plant cell of the plant, wherein nucleic acid hybridization between the marker nucleic acid molecule and the complementary nucleic acid molecule obtained from the plant permits the detection of a polymorphism whose presence is predictive of a mutation affecting said level or pattern of a protein synthesis in the plant; (B) permitting hybridization between said marker nucleic acid molecule and said complementary nucleic acid molecule obtained from said plant; and; (C) detecting the presence of the polymorphism, wherein the detection of the polymorphism is predictive of the mutation.

The present invention also provides a method for reducing expression of a protein in a plant cell, the method comprising: growing a transformed plant cell containing a nucleic acid molecule whose non-transcribed strand encodes a protein or fragment thereof, wherein the transcribed strand of said nucleic acid is complementary to a nucleic acid molecule that encodes the protein in said plant cell, and whereby the strand that is complementary to the nucleic acid molecule that encodes the protein reduces or depresses expression of the protein.

The present invention provides wheat nucleic acid molecules for use as molecular tags to isolate genetic regions (i.e. promoters and flanking sequences), isolate genes, map genes, and determine gene function. The present invention further provides wheat nucleic acid molecules for use in determining if genes are members of a particular gene family.

The present invention also provides a method of obtaining full length genes using wheat ESTs or complements thereof or fragments of either.

The present invention also provides a method of isolating promoters and flanking sequences using wheat ESTs or complements thereof or fragments of either.

The present invention also provides wheat ESTs or complements thereof or fragments of either for use in marker-assisted breeding programs.

The present invention also provides a method of identifying tissues comprising hybridizing nucleic acids from the tissue with wheat ESTs or complements thereof or fragments of either.

The present invention also provides a method for production of antibodies targeted against the proteins, peptides, or fragments produced by the disclosed or complements thereof or fragments of either.

The present invention also provides a method for the transformation and regeneration of plants comprising sequences hybridizable to the disclosed ESTs or complements thereof or fragments of either.

The present invention also provides a method of modifying plant protein expression by inserting in a chimeric gene sense or antisense constructs of the wheat ESTs.

## Detailed Description of the Invention

### Agents

#### (a) Nucleic Acid Molecules

Agents of the present invention include nucleic acid molecules and more specifically EST nucleic acid molecules or nucleic acid fragment molecules thereof. Fragment EST nucleic acid molecules may encode significant portion(s) of, or indeed most of, the EST nucleic acid molecule. Alternatively, the fragments may comprise smaller oligonucleotides (having from about 15 to about 250 nucleotide residues, and more preferably, about 15 to about 30 nucleotide residues).

A subset of the nucleic acid molecules of the present invention includes nucleic acid molecules that are marker molecules. Another subset of the nucleic acid molecules of the present invention include nucleic acid molecules that encode a protein or fragment thereof. Another subset of the nucleic acid molecules of the present invention are EST molecules.

The term "substantially purified", as used herein, refers to a molecule separated from substantially all other molecules normally associated with it in its native state. More preferably a substantially purified molecule is the predominant species present in a preparation. A substantially purified molecule may be greater than 60% free, preferably 75% free, more preferably 90% free, and most preferably 95% free from the other molecules (exclusive of solvent) present in the natural mixture. The term "substantially purified" is not intended to encompass molecules present in their native state.

The agents of the present invention will preferably be "biologically active" with respect to either a structural attribute, such as the capacity of a nucleic acid to hybridize to another nucleic acid molecule, or the ability of a protein to be bound by antibody (or to compete with another molecule for such binding). Alternatively, such an attribute may be

catalytic, and thus involve the capacity of the agent to mediate a chemical reaction or response.

The agents of the present invention may also be recombinant. As used herein, the term recombinant means any agent (e.g. DNA, peptide etc.), that is, or results, however indirect, from human manipulation of a nucleic acid molecule.

It is understood that the agents of the present invention may be labeled with reagents that facilitate detection of the agent (e.g. fluorescent labels (Prober, *et al., Science* 238:336-340 (1987); Albarella *et al.,* EP 144914, chemical labels (Sheldon *et al.,* U.S. Patent 4,582,789; Albarella *et al.,* U.S. Patent 4,563,417, modified bases (Miyoshi *et al.,* EP 119448, all of which are hereby incorporated by reference in their entirety).

It is further understood, that the present invention provides bacterial, viral, microbial, and plant cells comprising the agents of the present invention.

Nucleic acid molecules or fragment thereof of the present invention are capable of specifically hybridizing to other nucleic acid molecules under certain circumstances. As used herein, two nucleic acid molecules are said to be capable of specifically hybridizing to one another if the two molecules are capable of forming an anti-parallel, double-stranded nucleic acid structure. A nucleic acid molecule is said to be the "complement" of another nucleic acid molecule if they exhibit complete complementarity. As used herein, molecules are said to exhibit "complete complementarity" when every nucleotide of one of the molecules is complementary to a nucleotide of the other. Two molecules are said to be "minimally complementary" if they can hybridize to one another with sufficient stability to permit them to remain annealed to one another under at least conventional "low-stringency" conditions. Similarly, the molecules are said to be "complementary" if they can hybridize to one another with sufficient stability to permit them to remain annealed to one another under conventional "high-stringency" conditions. Conventional stringency conditions are described by Sambrook, *et al.*, In: *Molecular Cloning, A Laboratory Manual, 2nd Edition, Cold Spring Harbor Press*, Cold Spring Harbor, New York (1989), and by Haymes, *et al.* In: *Nucleic Acid Hybridization, A Practical Approach*, IRL Press, Washington, DC (1985), the entirety of which is herein incorporated by reference. Departures from complete complementarity are therefore permissible, as long as such departures do not completely preclude the capacity of

the molecules to form a double-stranded structure. Thus, in order for an nucleic acid molecule or fragment of the present invention to serve as a primer or probe it need only be sufficiently complementary in sequence to be able to form a stable double-stranded structure under the particular solvent and salt concentrations employed.

Appropriate stringency conditions which promote DNA hybridization are, for example, 6.0 x sodium chloride/sodium citrate (SSC) at about 45°C, followed by a wash of 2.0 x SSC at 50°C, are known to those skilled in the art or can be found in *Current Protocols in Molecular Biology*, John Wiley & Sons, N.Y. (1989), 6.3.1-6.3.6. For example, the salt concentration in the wash step can be selected from a low stringency of about 2.0 x SSC at 50°C to a high stringency of about 0.2 x SSC at 50°C. In addition, the temperature in the wash step can be increased from low stringency conditions at room temperature, about 22°C, to high stringency conditions at about 65°C. Both temperature and salt may be varied, or either the temperature or the salt concentration may be held constant while the other variable is changed.

In a preferred embodiment, a nucleic acid of the present invention will specifically hybridize to one or more of the nucleic acid molecules set forth in SEQ ID NO: 1 through SEQ ID NO: 10952 or complements thereof under moderately stringent conditions, for example, at about 2.0 x SSC and about 65°C.

In a particularly preferred embodiment, a nucleic acid of the present invention will include those nucleic acid molecules that specifically hybridize to one or more of the nucleic acid molecules set forth in SEQ ID NO:1 through SEQ ID NO: 10952 or complements thereof under high stringency conditions.

In one aspect of the present invention, the nucleic acid molecules of the present invention have one or more of the nucleic acid sequences set forth in SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof. In another aspect of the present invention, one or more of the nucleic acid molecules of the present invention share between 100% and 90% sequence identity with one or more of the nucleic acid sequences set forth in SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof. In a further aspect of the present invention, one or more of the nucleic acid molecules of the present invention share between 100% and 95% sequence identity with one or more of the nucleic acid sequences set forth in

SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof. In a more preferred aspect of the present invention, one or more of the nucleic acid molecules of the present invention share between 100% and 98% sequence identity with one or more of the nucleic acid sequences set forth in SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof. In an even more preferred aspect of the present invention, one or more of the nucleic acid molecules of the present invention share between 100% and 99% sequence identity with one or more of the sequences set forth in SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof. In a further, even more preferred aspect of the present invention, one or more of the nucleic acid molecules of the present invention exhibit 100% sequence identity with one or more nucleic acid molecules present within the cDNA libraries designated LIB3222, LIB3223, LIB3224, LIB3225, LIB3226, and LIB3241 (Monsanto Company, St. Louis, Missouri, United States of America).

In a preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of another plant protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of a fungal protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of mammalian protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of a bacterial protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of an algal protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of a soybean protein. In another preferred embodiment of the present invention, a wheat protein or fragment thereof of the present invention is a homologue of a maize protein.

In a preferred embodiment of the present invention, the nucleic molecule of the present invention encodes a wheat protein or fragment thereof where a wheat protein or fragment thereof exhibits a BLAST probability score of greater than 1E-12, preferably a BLAST probability score of between about 1E-30 and about 1E-12, even more preferably a BLAST probability score of greater than 1E-30 with its homologue.

In another preferred embodiment of the present invention, the nucleic acid molecule encoding a wheat protein or fragment thereof exhibits a % identity with its homologue of between about 25% and about 40%, more preferably of between about 40 and about 70%, even more preferably of between about 70% and about 90% and even more preferably between about 90% and 99%. In another preferred embodiment, of the present invention, a wheat protein or fragment thereof exhibits a % identity with its homologue of 100%.

In a preferred embodiment of the present invention, the nucleic molecule of the present invention encodes a wheat protein or fragment thereof where the wheat protein exhibits a BLAST score of greater than 120, preferably a BLAST score of between about 1450 and about 120, even more preferably a BLAST score of greater than 1450 with its homologue.

Nucleic acid molecules of the present invention also include non-wheat homologues. Preferred non-wheat homologues are selected from the group consisting of alfalfa, *Arabidopsis,* barley, *Brassica*, broccoli, cabbage, citrus, cotton, garlic, oat, oilseed rape, onion, canola, flax, an ornamental plant, maize, pea, peanut, pepper, potato, rice, rye, sorghum, soybean, strawberry, sugarcane, sugarbeet, tomato, poplar, pine, fir, eucalyptus, apple, lettuce, lentils, grape, banana, tea, turf grasses, sunflower, oil palm and *Phaseolus*.

The degeneracy of the genetic code, which allows different nucleic acid sequences to code for the same protein or peptide, is known in the literature. (U.S. Patent No. 4,757,006, the entirety of which is herein incorporated by reference).

In an aspect of the present invention, one or more of the nucleic acid molecules of the present invention differ in nucleic acid sequence from those encoding a wheat protein or fragment thereof in SEQ ID NO: 1 through SEQ ID NO: 10952 due to the degeneracy in the genetic code in that they encode the same protein but differ in nucleic acid sequence.

In another further aspect of the present invention, nucleic acid molecules of the present invention can comprise sequences, which differ from those encoding a protein or fragment thereof in SEQ ID NO: 1 through SEQ ID NO: 10952 due to fact that the different nucleic acid sequence encodes a protein having one or more conservative amino acid changes. It is understood that codons capable of coding for such conservative amino acid substitutions are known in the art.

It is well known in the art that one or more amino acids in a native sequence can be substituted with another amino acid(s), the charge and polarity of which are similar to that of the native amino acid, *i.e.*, a conservative amino acid substitution, resulting in a silent change. Conserved substitutes for an amino acid within the native polypeptide sequence can be selected from other members of the class to which the naturally occurring amino acid belongs. Amino acids can be divided into the following four groups: (1) acidic amino acids, (2) basic amino acids, (3) neutral polar amino acids, and (4) neutral nonpolar amino acids. Representative amino acids within these various groups include, but are not limited to, (1) acidic (negatively charged) amino acids such as aspartic acid and glutamic acid; (2) basic (positively charged) amino acids such as arginine, histidine, and lysine; (3) neutral polar amino acids such as glycine, serine, threonine, cysteine, cystine, tyrosine, asparagine, and glutamine; and (4) neutral nonpolar (hydrophobic) amino acids such as alanine, leucine, isoleucine, valine, proline, phenylalanine, tryptophan, and methionine.

Conservative amino acid changes within the native polypeptides sequence can be made by substituting one amino acid within one of these groups with another amino acid within the same group. Biologically functional equivalents of the proteins or fragments thereof of the present invention can have 10 or fewer conservative amino acid changes, more preferably seven or fewer conservative amino acid changes, and most preferably five or fewer conservative amino acid changes. The encoding nucleotide sequence will thus have corresponding base substitutions, permitting it to encode biologically functional equivalent forms of the proteins or fragments of the present invention.

It is understood that certain amino acids may be substituted for other amino acids in a protein structure without appreciable loss of interactive binding capacity with structures such as, for example, antigent-binding regions of antibodies or binding sites on substrate molecules. Because it is the interactive capacity and nature of a protein that defines that protein's biological functional activity, certain amino acid sequence substitutions can be made in a protein sequence and, of course, its underlying DNA coding sequence and, nevertheless, obtain a protein with like properties. It is thus contemplated by the inventors that various changes may be made in the peptide sequences of the proteins or fragments of the present invention, or corresponding DNA sequences that encode said peptides, without appreciable

loss of their biological utility or activity. It is understood that codons capable of coding for such amino acid changes are known in the art.

In making such changes, the hydropathic index of amino acids may be considered. The importance of the hydropathic amino acid index in conferring interactive biological function on a protein is generally understood in the art (Kyte and Doolittle, *J. Mol. Biol. 157*, 105-132 (1982), herein incorporated by reference in its entirety). It is accepted that the relative hydropathic character of the amino acid contributes to the secondary structure of the resultant protein, which in turn defines the interaction of the protein with other molecules, for example, enzymes, substrates, receptors, DNA, antibodies, antigens, and the like.

Each amino acid has been assigned a hydropathic index on the basis of its hydrophobicity and charge characteristics (Kyte and Doolittle, 1982); these are isoleucine (+4.5), valine (+4.2), leucine (+3.8), phenylalanine (+2.8), cysteine/cystine (+2.5), methionine (+1.9), alanine (+1.8), glycine (-0.4), threonine (-0.7), serine (-0.8), tryptophan (-0.9), tyrosine (-1.3), proline (-1.6), histidine (-3.2), glutamate (-3.5), glutamine (-3.5), aspartate (-3.5), asparagine (-3.5), lysine (-3.9), and arginine (-4.5).

In making such changes, the substitution of amino acids whose hydropathic indices are within ±2 is preferred, those which are within ±1 are particularly preferred, and those within ±0.5 are even more particularly preferred.

It is also understood in the art that the substitution of like amino acids can be made effectively on the basis of hydrophilicity. U.S. Patent 4,554,101, incorporated herein by reference in its entirety, states that the greatest local average hydrophilicity of a protein, as govern by the hydrophilicity of its adjacent amino acids, correlates with a biological property of the protein.

As detailed in U.S. Patent 4,554,101, the following hydrophilicity values have been assigned to amino acid residues: arginine (+3.0), lysine (+3.0), aspartate (+3.0±1), glutamate (+3.0±1), serine (+0.3), asparagine (+0.2), glutamine (+0.2), glycine (0), threonine (-0.4), proline (-0.5±1), alanine (-0.5), histidine (-0.5), cysteine (-1.0), methionine (-1.3), valine (-1.5), leucine (-1.8), isoleucine (-1.8), tyrosine (-2.3), phenylalanine (-2.5), and tryptophan (-3.4).

In making such changes, the substitution of amino acids whose hydrophilicity values are within ±2 is preferred, those which are within ±1 are particularly preferred, and those within ±0.5 are even more particularly preferred.

In a further aspect of the present invention, one or more of the nucleic acid molecules of the present invention differ in nucleic acid sequence from those encoding a wheat protein or fragment thereof set forth in SEQ ID NO: 1 through SEQ ID NO: 10952 or fragment thereof due to the fact that one or more codons encoding an amino acid has been substituted for a codon that encodes a nonessential substitution of the amino acid originally encoded.

One aspect of the present invention concerns markers that include nucleic acid molecules SEQ ID NO: 1 through SEQ ID NO: 10952 or complements thereof or fragments of either that can act as markers or other nucleic acid molecules of the present invention that can act as markers. Genetic markers of the present invention include "dominant" or "codominant" markers "Codominant markers" reveal the presence of two or more alleles (two per diploid individual) at a locus. "Dominant markers" reveal the presence of only a single allele per locus. The presence of the dominant marker phenotype (e.g., a band of DNA) is an indication that one allele is present in either the homozygous or heterozygous condition. The absence of the dominant marker phenotype (e.g. absence of a DNA band) is merely evidence that "some other" undefined allele is present. In the case of populations where individuals are predominantly homozygous and loci are predominately dimorphic, dominant and codominant markers can be equally valuable. As populations become more heterozygous and multi-allelic, codominant markers often become more informative of the genotype than dominant markers. Marker molecules can be, for example, capable of detecting polymorphisms such as single nucleotide polymorphisms (SNPs).

SNPs are single base changes in genomic DNA sequence. They occur at greater frequency and are spaced with a greater uniformity throughout a genome than other reported forms of polymorphism. The greater frequency and uniformity of SNPs means that there is greater probability that such a polymorphism will be found near or in a genetic locus of interest than would be the case for other polymorphisms. SNPs are located in protein-coding regions and noncoding regions of a genome. Some of these SNPs may result in defective or variant protein expression (e.g., as a results of mutations or defective splicing). Analysis

(genotyping) of characterized SNPs can require only a plus/minus assay rather than a lengthy measurement, permitting easier automation.

SNPs can be characterized using any of a variety of methods. Such methods include the direct or indirect sequencing of the site, the use of restriction enzymes (Botstein *et al.*, *Am. J. Hum. Genet. 32*:314-331 (1980), the entirety of which is herein incorporated reference; Konieczny and Ausubel, *Plant J. 4*:403-410 (1993), the entirety of which is herein incorporated by reference), enzymatic and chemical mismatch assays (Myers *et al.*, *Nature 313*:495-498 (1985), the entirety of which is herein incorporated by reference), allele-specific PCR (Newton *et al.*, *Nucl. Acids Res. 17*:2503-2516 (1989), the entirety of which is herein incorporated by reference; Wu *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 86*:2757-2760 (1989), the entirety of which is herein incorporated by reference), ligase chain reaction (Barany, *Proc. Natl. Acad. Sci. (U.S.A.) 88*:189-193 (1991), the entirety of which is herein incorporated by reference), single-strand conformation polymorphism analysis (Labrune *et al.*, *Am. J. Hum. Genet. 48*: 1115-1120 (1991), the entirety of which is herein incorporated by reference), primer-directed nucleotide incorporation assays (Kuppuswami *et al.*, *Proc. Natl. Acad. Sci. USA 88*:1143-1147 (1991), the entirety of which is herein incorporated by reference), dideoxy fingerprinting (Sarkar *et al.*, *Genomics 13*:441-443 (1992), the entirety of which is herein incorporated by reference), solid-phase ELISA-based oligonucleotide ligation assays (Nikiforov *et al.*, *Nucl. Acids Res. 22*:4167-4175 (1994), the entirety of which is herein incorporated by reference), oligonucleotide fluorescence-quenching assays (Livak *et al.*, *PCR Methods Appl. 4*:357-362 (1995), the entirety of which is herein incorporated by reference), 5'-nuclease allele-specific hybridization TaqMan assay (Livak *et al.*, *Nature Genet. 9*:341-342 (1995), the entirety of which is herein incorporated by reference), template-directed dye-terminator incorporation (TDI) assay (Chen and Kwok, *Nucl. Acids Res. 25*:347-353 (1997), the entirety of which is herein incorporated by reference), allele-specific molecular beacon assay (Tyagi *et al.*, *Nature Biotech. 16*: 49-53 (1998), the entirety of which is herein incorporated by reference), PinPoint assay (Haff and Smirnov, *Genome Res. 7*: 378-388 (1997), the entirety of which is herein incorporated by reference) and dCAPS analysis (Neff *et al.*, *Plant J. 14*:387-392 (1998), the entirety of which is herein incorporated by reference).

Additional markers, such as AFLP markers, RFLP markers and RAPD markers, can be utilized (Walton, *Seed World* 22-29 (July, 1993), the entirety of which is herein incorporated by reference; Burow and Blake, *Molecular Dissection of Complex Traits*, 13-29, Paterson (ed.), CRC Press, New York (1988), the entirety of which is herein incorporated by reference). DNA markers can be developed from nucleic acid molecules using restriction endonucleases, the PCR and/or DNA sequence information. RFLP markers result from single base changes or insertions/deletions. These codominant markers are highly abundant in plant genomes, have a medium level of polymorphism and are developed by a combination of restriction endonuclease digestion and Southern blotting hybridization. CAPS are similarly developed from restriction nuclease digestion but only of specific PCR products. These markers are also codominant, have a medium level of polymorphism and are highly abundant in the genome. The CAPS result from single base changes and insertions/deletions.

Another marker type, RAPDs, are developed from DNA amplification with random primers and result from single base changes and insertions/deletions in plant genomes. They are dominant markers with a medium level of polymorphisms and are highly abundant. AFLP markers require using the PCR on a subset of restriction fragments from extended adapter primers. These markers are both dominant and codominant are highly abundant in genomes and exhibit a medium level of polymorphism.

SSRs require DNA sequence information. These codominant markers result from repeat length changes, are highly polymorphic and do not exhibit as high a degree of abundance in the genome as CAPS, AFLPs and RAPDs, SNPs also require DNA sequence information. These codominant markers result from single base substitutions. They are highly abundant and exhibit a medium of polymorphism (Rafalski *et al.*, In: *Nonmammalian Genomic Analysis*, Birren and Lai (ed.), Academic Press, San Diego, CA, pp. 75-134 (1996), the entirety of which is herein incorporated by reference). It is understood that a nucleic acid molecule of the present invention may be used as a marker.

A PCR probe is a nucleic acid molecule capable of initiating a polymerase activity while in a double-stranded structure with another nucleic acid. Various methods for determining the structure of PCR probes and PCR techniques exist in the art. Computer generated searches using programs such as Primer3 (www-genome.wi.mit.edu/cgi-

bin/primer/primer3.cgi), STSPipeline (www-genome.wi.mit.edu/cgi-bin/www-STS_Pipeline), or GeneUp (Pesole *et al.*, *BioTechniques 25*:112-123 (1998) the entirety of which is herein incorporated by reference), for example, can be used to identify potential PCR primers.

It is understood that a fragment of one or more of the nucleic acid molecules of the present invention may be a probe and specifically a PCR probe.

(b) **Protein and Peptide Molecules**

A class of agents comprises one or more of the protein or peptide molecules encoded by SEQ ID NO: 1 through SEQ ID NO:10952 or one or more of the protein or fragment thereof or peptide molecules encoded by other nucleic acid agents of the present invention. As used herein, the term "protein molecule" or "peptide molecule" includes any molecule that comprises five or more amino acids. It is well know in the art that proteins may undergo modification, including post-translational modifications, such as, but not limited to, disulfide bond formation, glycosylation, phosphorylation, or oligomerization. Thus, as used herein, the term "protein molecule" or "peptide molecule" includes any protein molecule that is modified by any biological or non-biological process. The terms "amino acid" and "amino acids" refer to all naturally occurring L-amino acids. This definition is meant to include norleucine, ornithine, homocysteine, and homoserine.

One or more of the protein or fragment of peptide molecules may be produced via chemical synthesis, or more preferably, by expression in a suitable bacterial or eukaryotic host. Suitable methods for expression are described by Sambrook, *et al.*, (In: *Molecular Cloning, A Laboratory Manual, 2nd Edition, Cold Spring Harbor Press*, Cold Spring Harbor, New York (1989)), or similar texts.

A "protein fragment" is a peptide or polypeptide molecule whose amino acid sequence comprises a subset of the amino acid sequence of that protein. A protein or fragment thereof that comprises one or more additional peptide regions not derived from that protein is a "fusion" protein. Such molecules may be derivatized to contain carbohydrate or other moieties (such as keyhole limpet hemocyanin, etc.). Fusion protein or peptide molecule of the present invention are preferably produced via recombinant means.

Another class of agents comprise protein or peptide molecules encoded by SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof or, fragments or fusions thereof in

which non-essential, or not relevant, amino acid residues have been added, replaced, or deleted. An example of such a homologue is the homologue protein of all non- wheat plant species, including but not limited to alfalfa, *Arabidopsis*, barley, *Brassica*, broccoli, cabbage, citrus, cotton, garlic, oat, oilseed rape, onion, canola, flax, maize, an ornamental plant, pea, peanut, pepper, potato, rice, rye, sorghum, soybean, strawberry, sugarcane, sugarbeet, tomato, poplar, pine, fir, eukalyptus, apple, lettuce, peas, lentils, grape, banana, tea, turf grasses, etc. Particularly preferred non-wheat plants to utilize for the isolation of homologues would include alfalfa, *Arabidopsis*, barley, cotton, corn, oat, oilseed rape, rice, canola, ornamentals, soybean, sugarcane, sugarbeet, tomato, potato, and turf grasses. Such a homologue can be obtained by any of a variety of methods. Most preferably, as indicated above, one or more of the disclosed sequences (SEQ ID NO: 1 through SEQ ID NO:10952 or complements thereof) will be used to define a pair of primers that may be used to isolate the homologue-encoding nucleic acid molecules from any desired species. Such molecules can be expressed to yield homologues by recombinant means.

(c) **Antibodies**

One aspect of the present invention concerns antibodies, single-chain antigen binding molecules, or other proteins that specifically bind to one or more of the protein or peptide molecules of the present invention and their homologues, fusions or fragments. Such antibodies may be used to quantitatively or qualitatively detect the protein or peptide molecules of the present invention. As used herein, an antibody or peptide is said to "specifically bind" to a protein or peptide molecule of the present invention if such binding is not competitively inhibited by the presence of non-related molecules.

Nucleic acid molecules that encode all or part of the protein of the present invention can be expressed, via recombinant means, to yield protein or peptides that can in turn be used to elicit antibodies that are capable of binding the expressed protein or peptide. Such antibodies may be used in immunoassays for that protein. Such protein-encoding molecules, or their fragments may be a "fusion" molecule (i.e., a part of a larger nucleic acid molecule) such that, upon expression, a fusion protein is produced. It is understood that any of the nucleic acid molecules of the present invention may be expressed, via recombinant means, to yield proteins or peptides encoded by these nucleic acid molecules.

The antibodies that specifically bind proteins and protein fragments of the present invention may be polyclonal or monoclonal, and may comprise intact immunoglobulins, or antigen binding portions of immunoglobulins (such as (F(ab'), $F(ab')_2$) fragments, or single-chain immunoglobulins producible, for example, via recombinant means). It is understood that practitioners are familiar with the standard resource materials which describe specific conditions and procedures for the construction, manipulation and isolation of antibodies (see, for example, Harlow and Lane, In *Antibodies: A Laboratory Manual*, Cold Spring Harbor Press, Cold Spring Harbor, New York (1988), the entirety of which is herein incorporated by reference).

Murine monoclonal antibodies are particularly preferred. BALB/c mice are preferred for this purpose, however, equivalent strains may also be used. The animals are preferably immunized with approximately 25 μg of purified protein (or fragment thereof) that has been emulsified a suitable adjuvant (such as TiterMax adjuvant (Vaxcel, Norcross, GA)). Immunization is preferably conducted at two intramuscular sites, one intraperitoneal site, and one subcutaneous site at the base of the tail. An additional i.v. injection of approximately 25 μg of antigen is preferably given in normal saline three weeks later. After approximately 11 days following the second injection, the mice may be bled and the blood screened for the presence of anti-protein or peptide antibodies. Preferably, a direct binding Enzyme-Linked Immunoassay (ELISA) is employed for this purpose.

More preferably, the mouse having the highest antibody titer is given a third i.v. injection of approximately 25 μg of the same protein or fragment. The splenic leukocytes from this animal may be recovered 3 days later, and are then permitted to fuse, most preferably, using polyethylene glycol, with cells of a suitable myeloma cell line (such as, for example, the P3X63Ag8.653 myeloma cell line). Hybridoma cells are selected by culturing the cells under "HAT" (hypoxanthine-aminopterin-thymine) selection for about one week. The resulting clones may then be screened for their capacity to produce monoclonal antibodies ("mAbs), preferably by direct ELISA.

In one embodiment, anti-protein or peptide monoclonal antibodies are isolated using a fusion of a protein, protein fragment, or peptide of the present invention, or conjugate of a protein, protein fragment, or peptide of the present invention, as immunogens. Thus, for

example, a group of mice can be immunized using a fusion protein emulsified in Freund's complete adjuvant (e.g. approximately 50 μg of antigen per immunization). At three week intervals, an identical amount of antigen is emulsified in Freund's incomplete adjuvant and used to immunize the animals. Ten days following the third immunization, serum samples are taken and evaluated for the presence of antibody. If antibody titers are too low, a fourth booster can be employed. Polysera capable of binding the protein or peptide can also be obtained using this method.

In a preferred procedure for obtaining monoclonal antibodies, the spleens of the above-described immunized mice are removed, disrupted, and immune splenocytes are isolated over a ficoll gradient. The isolated splenocytes are fused, using polyethylene glycol with BALB/c-derived HGPRT (hypoxanthine guanine phosphoribosyl transferase) deficient P3x63xAg8.653 plasmacytoma cells. The fused cells are plated into 96-well microtiter plates and screened for hybridoma fusion cells by their capacity to grow in culture medium supplemented with hypothanthine, aminopterin and thymidine for approximately 2-3 weeks.

Hybridoma cells that arise from such incubation are preferably screened for their capacity to produce an immunoglobulin that binds to a protein of interest. An indirect ELISA may be used for this purpose. In brief, the supernatants of hybridomas are incubated in microtiter wells that contain immobilized protein. After washing, the titer of bound immunoglobulin can be determined using, for example, a goat anti-mouse antibody conjugated to horseradish peroxidase. After additional washing, the amount of immobilized enzyme is determined (for example through the use of a chromogenic substrate). Such screening is performed as quickly as possible after the identification of the hybridoma in order to ensure that a desired clone is not overgrown by non-secreting neighbors. Desirably, the fusion plates are screened several times since the rates of hybridoma growth vary. In a preferred sub-embodiment, a different antigenic form of immunogen may be used to screen the hybridoma. Thus, for example, the splenocytes may be immunized with one immunogen, but the resulting hybridomas can be screened using a different immunogen. It is understood that any of the protein or peptide molecules of the present invention may be used to raise antibodies.

As discussed below, such antibody molecules or their fragments may be used for diagnostic purposes. Where the antibodies are intended for diagnostic purposes, it may be desirable to derivatize them, for example with a ligand group (such as biotin) or a detectable marker group (such as a fluorescent group, a radioisotope or an enzyme).

The ability to produce antibodies that bind the protein or peptide molecules of the present invention permits the identification of mimetic compounds of those molecules. A "mimetic compound" is a compound that is not that compound, or a fragment of that compound, but which nonetheless exhibits an ability to specifically bind to antibodies directed against that compound.

It is understood that any of the agents of the present invention can be substantially purified and/or be biologically active and/or recombinant.

**Uses of the Agents of the Invention**

The nucleic acid molecules and fragments thereof of the present invention from the cDNA libraries LIB3222, LIB3223 and LIB3225 are isolated from flowers, which are harvested from the wheat plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11). The ESTs of the present invention can enable the acquisition of, including but not limited to, genes involved in floral development, reproduction, female production and development (ovary/ovule development, stigma development and style development), pollen production and development, seed production, glume development, lemma development, palea development, and pathogen resistance or susceptibility, therefore, the ESTs of the present invention will find great use in the isolation of a variety of agronomically significant genes, including but not limited to, non-regulatory genes and genes that regulate microsporogenesis, meiosis, cell cycle, signal transduction, cell-cell communication, carotenoids, floral biogenesis, embryogenesis, protein, amino acids, sterols, oils, minerals, isoflavones, saponins, vitamins, tocopherols, antinutrient components, carbohydrates, starch metabolism, and seed composition and function. Such genes are associated with plant growth, quality and yield, and could also serve as links in important developmental, metabolic, and catabolic pathways. Libraries from this tissue can enable the acquisition of a variety of agronomically significant genes involved in the synthesis

and catabolism of commercially important traits. The ESTs of the present invention also can enable the acquisition of promoters and cis-regulatory elements which will be useful to express agronomically significant genes in these tissues and/or other tissues. The ESTs of the present invention also can enable the acquisition of molecular markers, which can be used in, including but not limited to, breeding schemes, genetic and molecular mapping, and cloning of agronomically significant genes.

The nucleic acid molecules and fragments thereof of the present invention from the cDNA libraries LIB3224, LIB3226 and LIB3241 are isolated from roots, which are harvested from the wheat plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11). Roots play a critical role in major vegetative organs which supply water, minerals, and substances essential for plant growth and development, therefore, the ESTs of the present invention will find great use in the isolation of a variety of agronomically significant genes, including but not limited to genes that are necessary for absorption, anchorage, storage, transport, and propagation. Such genes are associated with plant growth, quality and yield, and could also serve as links in important developmental, metabolic, and catabolic pathways. Libraries from this tissue can enable the acquisition of a variety of agronomically significant genes involved in the synthesis and catabolism of commercially important traits. The ESTs of the present invention also can enable the acquisition of promoters and cis-regulatory elements which will be useful to express agronomically significant genes in these tissues and/or other tissues. The ESTs of the present invention also can enable the acquisition of molecular markers, which can be used in, including but not limited to, breeding schemes, genetic and molecular mapping, and cloning of agronomically significant genes.

Nucleic acid molecules and fragments thereof of the present invention may be employed to obtain other nucleic acid molecules. Such molecules include the nucleic acid molecules of other plants or other organisms (*e.g.*, alfalfa, rice, potato, cotton, oat, rye, barley, maize, wheat, *Arabidopsis, Brassica,* etc.) including the nucleic acid molecules that encode, in whole or in part, protein homologues of other plant species or other organisms, and sequences of genetic elements such as promoters and transcriptional regulatory elements. Such molecules can be readily obtained by using the above-described nucleic acid molecules or

fragments thereof to screen cDNA or genomic libraries obtained from such plant species. Methods for forming such libraries are well known in the art. Such homologue molecules may differ in their nucleotide sequences from those found in one or more of SEQ ID NO:1 through SEQ ID NO:10952 or complements thereof because complete complementarity is not needed for stable hybridization. The nucleic acid molecules of the present invention therefore also include molecules that, although capable of specifically hybridizing with the nucleic acid molecules may lack "complete complementarity."

Any of a variety of methods may be used to obtain one or more of the above-described nucleic acid molecules (Zamechik *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 83*:4143-4146 (1986), the entirety of which is herein incorporated by reference; Goodchild *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 85*:5507-5511 (1988), the entirety of which is herein incorporated by reference; Wickstrom *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 85*:1028-1032 (1988), the entirety of which is herein incorporated by reference; Holt, *et al.*, *Molec. Cell. Biol. 8*:963-973 (1988), the entirety of which is herein incorporated by reference; Gerwirtz, *et al.*, *Science 242*:1303-1306 (1988), the entirety of which is herein incorporated by reference; Anfossi, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 86*:3379-3383 (1989), the entirety of which is herein incorporated by reference; Becker, *et al.*, *EMBO J. 8*:3685-3691 (1989); the entirety of which is herein incorporated by reference). Automated nucleic acid synthesizers may be employed for this purpose. In lieu of such synthesis, the disclosed nucleic acid molecules may be used to define a pair of primers that can be used with the polymerase chain reaction (Mullis, *et al.*, *Cold Spring Harbor Symp. Quant. Biol. 51*:263-273 (1986); Erlich *et al.*, EP 50,424; EP 84,796, EP 258,017, EP 237,362; Mullis, EP 201,184; Mullis *et al.*, US 4,683,202; Erlich, US 4,582,788; and Saiki, R. *et al.*, US 4,683,194, all of which are hereby incorporated by reference in their entirety) to amplify and obtain any desired nucleic acid molecule or fragment.

Promoter sequence(s) and other genetic elements including but not limited to transcriptional regulatory elements associated with one or more of the disclosed nucleic acid sequences can also be obtained using the disclosed nucleic acid sequences provided herein.

In one embodiment, such sequences are obtained by incubating EST nucleic acid molecules or preferably fragments thereof with members of genomic libraries (*e.g.* maize, soybean and wheat) and recovering clones that hybridize to the EST nucleic acid molecule or

fragment thereof. In a second embodiment, methods of "chromosome walking," or inverse PCR may be used to obtain such sequences (Frohman, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 85*:8998-9002 (1988); Ohara, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 86*: 5673-5677 (1989); Pang *et al.*, *Biotechniques*, 22(6); 1046-1048 (1977); Huang *et al.*, *Methods Mol. Biol.* 69: 89-96 (1977); Hartl *et al.*, *Methods Mol. Biol.* 58: 293-301 (1996), all of which are hereby incorporated by reference in their entirety). In one embodiment, the disclosed nucleic acid molecules are used to identify cDNAs whose analogous genes contain promoters with desirable expression patterns. The nucleic acid molecules isolated from the library of the present invention are used to isolate promoters of tissue-enhanced, tissue-specific, developmentally- or environmentally-regulated expression profiles. Isolation and functional analysis of the 5' flanking promoter sequences of these genes from genomic libraries, for example, using genomic screening methods and PCR techniques would result in the isolation of useful promoters and transcriptional regulatory elements. These methods are known to those of skill in the art and have been described (See for example Birren *et al.*, *Genome Analysis:Analyzing DNA*, 1, (1997), Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y., the entirety of which is herein incorporated by reference).

Promoters obtained utilizing the nucleic acid molecules of the present invention could also be modified to affect their control characteristics. Examples of such modifications would include but are not limited to enhancer sequences as reported by Kay *et al.*, *Science 236*:1299 (1987), herein incorporated by reference in its entirety. Such genetic elements could be used to enhance gene expression of new and existing traits for crop improvements.

The nucleic acid molecules of the present invention may be used to isolate promoters of tissue enhanced. tissue specific, cell-specific, cell -type, developmentally or environmentally regulated expression profiles. Isolation and functional analysis of the 5' flanking promoter sequences of these genes from genomic libraries, for example, using genomic screening methods and PCR techniques would result in the isolation of useful promoters and transcriptional regulatory elements. These methods are known to those of skill in the art and have been described (*See*, for example, *Birren et. al.*, *Genome Analysis*: *Analyzing DNA*, 1, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y. (1997), the entirety of which is herein incorporated by reference). Promoters obtained utilizing the

nucleic acid molecules of the present invention could also be modified to affect their control characteristics. Examples of such modifications would include but are not limited to enhancer sequences as reported by Kay, *et al Science 236*:1299 (1987), herein incorporated reference in its entirety. Such genetic elements could be used to enhance gene expression of new and existing traits for crop improvements.

In an aspect of the present invention, one or more of the nucleic molecules of the present invention are used to determine whether a plant (preferably wheat) has a mutation affecting the level (i.e., the concentration of mRNA in a sample, etc.) or pattern (i.e., the kinetics of expression, rate of decomposition, stability profile, etc.) of the expression encoded in part or whole by one or more of the nucleic acid molecules of the present invention (collectively, the "Expression Response" of a cell or tissue). As used herein, the Expression Response manifested by a cell or tissue is said to be "altered" if it differs from the Expression Response of cells or tissues of plants not exhibiting the phenotype. To determine whether a Expression Response is altered, the Expression Response manifested by the cell or tissue of the plant exhibiting the phenotype is compared with that of a similar cell or tissue sample of a plant not exhibiting the phenotype. As will be appreciated, it is not necessary to re-determine the Expression Response of the cell or tissue sample of plants not exhibiting the phenotype each time such a comparison is made; rather, the Expression Response of a particular plant may be compared with previously obtained values of normal plants. As used herein, the phenotype of the organism is any of one or more characteristics of an organism (e.g. disease resistance, pest tolerance, environmental tolerance, male sterility, yield, quality improvements, etc.). A change in genotype or phenotype may be transient or permanent. Also as used herein, a tissue sample is any sample that comprises more than one cell. In a preferred aspect, a tissue sample comprises cells that share a common characteristic (e.g. derived from leaf, root, or pollen etc).

In one sub-aspect, such an analysis is conducted by determining the presence and/or identity of polymorphism(s) by one or more of the nucleic acid molecules of the present invention and more specifically, one or more of the EST nucleic acid molecules or fragments thereof which are associated with phenotype, or a predisposition to phenotype.

Any of a variety of molecules can be used to identify such polymorphism(s). In one embodiment, one or more of the EST nucleic acid molecules (or a sub-fragment thereof) may be employed as a marker nucleic acid molecule to identify such polymorphism(s). Alternatively, such polymorphisms can be detected through the use of a marker nucleic acid molecule or a marker protein that is genetically linked to (i.e., a polynucleotide that co-segregates with) such polymorphism(s).

In an alternative embodiment, such polymorphisms can be detected through the use of a marker nucleic acid molecule that is physically linked to such polymorphism(s). For this purpose, marker nucleic acid molecules comprising a nucleotide sequence of a polynucleotide located within 1 mb of the polymorphism(s), and more preferably within 100 kb of the polymorphism(s), and most preferably within 10 kb of the polymorphism(s) can be employed.

The genomes of animals and plants naturally undergo spontaneous mutation in the course of their continuing evolution (Gusella, *Ann. Rev. Biochem.* 55:831-854 (1986)). A "polymorphism" is a variation or difference in the sequence of the gene or its flanking regions that arises in some of the members of a species. The variant sequence and the "original" sequence co-exist in the species' population. In some instances, such co-existence is in stable or quasi-stable equilibrium.

A polymorphism is thus said to be "allelic," in that, due to the existence of the polymorphism, some members of a species may have the original sequence (i.e., the original "allele") whereas other members may have the variant sequence (i.e., the variant "allele"). In the simplest case, only one variant sequence may exist, and the polymorphism is thus said to be di-allelic. In other cases, the species' population may contain multiple alleles, and the polymorphism is termed tri-allelic, etc. A single gene may have multiple different unrelated polymorphisms. For example, it may have a di-allelic polymorphism at one site, and a multi-allelic polymorphism at another site.

The variation that defines the polymorphism may range from a single nucleotide variation to the insertion or deletion of extended regions within a gene. In some cases, the DNA sequence variations are in regions of the genome that are characterized by short tandem repeats (STRs) that include tandem di- or tri-nucleotide repeated motifs of nucleotides. Polymorphisms characterized by such tandem repeats are referred to as "variable number

tandem repeat" ("VNTR") polymorphisms. VNTRs have been used in identity analysis (Weber, U.S. Patent 5,075,217; Armour, *et al.*, *FEBS Lett. 307*:113-115 (1992); Jones, *et al.*, *Eur. J. Haematol. 39*:144-147 (1987); Horn, *et al.*, PCT Application WO91/14003; Jeffreys, European Patent Application 370,719; Jeffreys, U.S. Patent 5,699,082; Jeffreys. *et al.*, *Amer. J. Hum. Genet. 39*:11-24 (1986); Jeffreys. *et al.*, *Nature 316*:76-79 (1985); Gray, *et al.*, *Proc. R. Acad. Soc. Lond. 243*:241-253 (1991); Moore, *et al.*, *Genomics 10*:654-660 (1991); Jeffreys, *et al.*, *Anim. Genet. 18*:1-15 (1987); Hillel, *et al.*, *Anim. Genet. 20*:145-155 (1989); Hillel, *et al.*, *Genet. 124*:783-789 (1990), all of which are herein incorporated by reference in their entirety).

The detection of polymorphic sites in a sample of DNA may be facilitated through the use of nucleic acid amplification methods. Such methods specifically increase the concentration of polynucleotides that span the polymorphic site, or include that site and sequences located either distal or proximal to it. Such amplified molecules can be readily detected by gel electrophoresis or other means.

The most preferred method of achieving such amplification employs the polymerase chain reaction ("PCR") (Mullis, *et al.*, *Cold Spring Harbor Symp. Quant. Biol. 51*:263-273 (1986); Erlich, *et al.*, European Patent Appln. 50,424; European Patent Appln. 84,796, European Patent Application 258,017, European Patent Appln. 237,362; Mullis, European Patent Appln. 201,184; Mullis, *et al.*, U.S. Patent No. 4,683,202; Erlich., U.S. Patent No. 4,582,788; and Saiki, *et al.*, U.S. Patent No. 4,683,194, all of which are herein incorporated by reference), using primer pairs that are capable of hybridizing to the proximal sequences that define a polymorphism in its double-stranded form.

In lieu of PCR, alternative methods, such as the "Ligase Chain Reaction" ("LCR") may be used (Barany, *Proc. Natl. Acad. Sci. (U.S.A.) 88*:189-193 (1991), the entirety of which is herein incorporated by reference). LCR uses two pairs of oligonucleotide probes to exponentially amplify a specific target. The sequences of each pair of oligonucleotides is selected to permit the pair to hybridize to abutting sequences of the same strand of the target. Such hybridization forms a substrate for a template-dependent ligase. As with PCR, the resulting products thus serve as a template in subsequent cycles and an exponential amplification of the desired sequence is obtained.

LCR can be performed with oligonucleotides having the proximal and distal sequences of the same strand of a polymorphic site. In one embodiment, either oligonucleotide will be designed to include the actual polymorphic site of the polymorphism. In such an embodiment, the reaction conditions are selected such that the oligonucleotides can be ligated together only if the target molecule either contains or lacks the specific nucleotide that is complementary to the polymorphic site present on the oligonucleotide. Alternatively, the oligonucleotides may be selected such that they do not include the polymorphic site (see, Segev, PCT Application WO 90/01069, the entirety of which is herein incorporated by reference).

The "Oligonucleotide Ligation Assay" ("OLA") may alternatively be employed (Landegren, *et al.*, *Science 241*:1077-1080 (1988), the entirety of which is herein incorporated by reference). The OLA protocol uses two oligonucleotides which are designed to be capable of hybridizing to abutting sequences of a single strand of a target. OLA, like LCR, is particularly suited for the detection of point mutations. Unlike LCR, however, OLA results in "linear" rather than exponential amplification of the target sequence.

Nickerson, *et al.* have described a nucleic acid detection assay that combines attributes of PCR and OLA (Nickerson, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 87*:8923-8927 (1990), the entirety of which is herein incorporated by reference). In this method, PCR is used to achieve the exponential amplification of target DNA, which is then detected using OLA. In addition to requiring multiple, and separate, processing steps, one problem associated with such combinations is that they inherit all of the problems associated with PCR and OLA.

Schemes based on ligation of two (or more) oligonucleotides in the presence of nucleic acid having the sequence of the resulting "di-oligonucleotide", thereby amplifying the di-oligonucleotide, are also known (Wu, *et al.*, *Genomics 4*:560 (1989), the entirety of which is herein incorporated by reference), and may be readily adapted to the purposes of the present invention.

Other known nucleic acid amplification procedures, such as allele-specific oligomers, branched DNA technology, transcription-based amplification systems, or isothermal amplification methods may also be used to amplify and analyze such polymorphisms (Malek, *et al.*, U.S. Patent 5,130,238; Davey, *et al.*, European Patent Application 329,822; Schuster *et*

*al.*, U.S. Patent 5,169,766; Miller, *et al.*, PCT Application WO 89/06700; Kwoh, *et al.*, *Proc. Natl. Acad. Sci.* (U.S.A.) *86*:1173-1177 (1989); Gingeras, *et al.*, PCT Application WO 88/10315; Walker, *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 89*:392-396 (1992), all of which are herein incorporated by reference in their entirety).

The identification of a polymorphism can be determined in a variety of ways. By correlating the presence or absence of it in a plant with the presence or absence of a phenotype, it is possible to predict the phenotype of that plant. If a polymorphism creates or destroys a restriction endonuclease cleavage site, or if it results in the loss or insertion of DNA (e.g., a VNTR polymorphism), it will alter the size or profile of the DNA fragments that are generated by digestion with that restriction endonuclease. As such, individuals that possess a variant sequence can be distinguished from those having the original sequence by restriction fragment analysis. Polymorphisms that can be identified in this manner are termed "restriction fragment length polymorphisms" ("RFLPs"). RFLPs have been widely used in human and plant genetic analyses (Glassberg, UK Patent Application 2135774; Skolnick, *et al.*, *Cytogen. Cell Genet. 32*:58-67 (1982); Botstein, *et al.*, *Ann. J. Hum. Genet. 32*:314-331 (1980); Fischer, *et al.* (PCT Application WO90/13668); Uhlen, PCT Application WO90/11369).

Polymorphisms can also be identified by Single Strand Conformation Polymorphism (SSCP) analysis. The SSCP technique is a method capable of identifying most sequence variations in a single strand of DNA, typically between 150 and 250 nucleotides in length (Elles, *Methods in Molecular Medicine: Molecular Diagnosis of Genetic Diseases*, Humana Press (1996), the entirety of which is herein incorporated by reference); Orita *et al., Genomics 5:* 874-879 (1989), the entirety of which is herein incorporated by reference). Under denaturing conditions a single strand of DNA will adopt a conformation that is uniquely dependent on its sequence conformation. This conformation usually will be different, even if only a single base is changed. Most conformations have been reported to alter the physical configuration or size sufficiently to be detectable by electrophoresis. A number of protocols have been described for SSCP including, but not limited to Lee *et al., Anal. Biochem. 205:* 289-293 (1992), the entirety of which is herein incorporated by reference; Suzuki *et al., Anal. Biochem. 192:* 82-84 (1991), the entirety of which is herein incorporated by reference; Lo *et*

*al., Nucleic Acids Research 20:* 1005-1009 (1992), the entirety of which is herein incorporated by reference; Sarkar *et al., Genomics 13:* 441-443 (1992), the entirety of which is herein incorporated by reference). It is understood that one or more of the nucleic acids of the present invention, may be utilized as markers or probes to detect polymorphisms by SSCP analysis.

Polymorphisms may also be found using a DNA fingerprinting technique called amplified fragment length polymorphism (AFLP), which is based on the selective PCR amplification of restriction fragments from a total digest of genomic DNA to profile that DNA. Vos, *et al., Nucleic Acids Res. 23*:4407-4414 (1995), the entirety of which is herein incorporated by reference. This method allows for the specific co-amplification of high numbers of restriction fragments, which can be visualized by PCR without knowledge of the nucleic acid sequence.

AFLP employs basically three steps. Initially, a sample of genomic DNA is cut with restriction enzymes and oligonucleotide adapters are ligated to the restriction fragments of the DNA. The restriction fragments are then amplified using PCR by using the adapter and restriction sequence as target sites for primer annealing. The selective amplification is achieved by the use of primers that extend into the restriction fragments, amplifying only those fragments in which the primer extensions match the nucleotide flanking the restriction sites. These amplified fragments are then visualized on a denaturing polyacrylamide gel.

AFLP analysis has been performed on *Salix* (Beismann, *et al., Mol. Ecol. 6*:989-993 (1997), the entirety of which is herein incorporated by reference); *Acinetobacter* (Janssen, *et al., Int. J. Syst. Bacteriol 47*:1179-1187 (1997), the entirety of which is herein incorporated by reference), *Aeromonas popoffi* (Huys, *et al., Int. J. Syst. Bacteriol. 47*:1165-1171 (1997), the entirety of which is herein incorporated by reference), rice (McCouch, *et al., Plant Mol. Biol. 35*:89-99 (1997), the entirety of which is herein incorporated by reference); Nandi, *et al., Mol. Gen. Genet. 255*:1-8 (1997); Cho, *et al., Genome 39*:373-378 (1996), herein incorporated by reference), barley (*Hordeum vulgare*)(Simons, *et al., Genomics 44*:61-70 (1997), the entirety of which is herein incorporated by reference; Waugh, *et al., Mol. Gen. Genet. 255*:311-321 (1997), the entirety of which is herein incorporated by reference; Qi, *et al., Mol. Gen Genet. 254*:330-336 (1997), the entirety of which is herein incorporated by reference; Becker, *et al.,*

*Mol. Gen. Genet. 249*:65-73 (1995), the entirety of which is herein incorporated by reference), potato (Van der Voort, *et al.*, *Mol. Gen. Genet. 255*:438-447 (1997), the entirety of which is herein incorporated by reference; Meksem, *et al.*, *Mol. Gen. Genet. 249*:74-81 (1995), the entirety of which is herein incorporated by reference), *Phytophthora infestans* (Van der Lee, *et al.*, *Fungal Genet. Biol. 21*:278-291 (1997), the entirety of which is herein incorporated by reference), *Bacillus anthracis* (Keim, *et al.*, *J. Bacteriol. 179*:818-824 (1997)), *Astragalus cremnophylax* (Travis, *et al.*, *Mol. Ecol. 5*:735-745 (1996), the entirety of which is herein incorporated by reference), *Arabidopsis* (Cnops, *et al.*, *Mol. Gen. Genet. 253*:32-41 (1996), the entirety of which is herein incorporated by reference), *Escherichia coli* (Lin, *et al.*, *Nucleic Acids Res. 24*:3649-3650 (1996), the entirety of which is herein incorporated by reference), *Aeromonas* (Huys, *et al.*, *Int. J. Syst. Bacteriol. 46*:572-580 (1996), the entirety of which is herein incorporated by reference), nematode (Folkertsma, *et al.*, *Mol. Plant Microbe Interact. 9*:47-54 (1996), the entirety of which is herein incorporated by reference), tomato (Thomas, *et al.*, *Plant J. 8*:785-794 (1995), the entirety of which is herein incorporated by reference), and human (Latorra, *et al.*, *PCR Methods Appl. 3*:351-358 (1994)). AFLP analysis has also been used for fingerprinting mRNA (Money, *et al.*, *Nucleic Acids Res. 24*:2616-2617 (1996), the entirety of which is herein incorporated by reference; Bachem, *et al.*, *Plant J. 9:*745-753 (1996), the entirety of which is herein incorporated by reference). It is understood that one or more of the nucleic acids of the present invention, may be utilized as markers or probes to detect polymorphisms by AFLP analysis for fingerprinting mRNA.

Polymorphisms may also be found using random amplified polymorphic DNA (RAPD) (Williams *et al., Nucl. Acids Res. 18*: 6531-6535 (1990), the entirety of which is herein incorporated by reference) and cleaveable amplified polymorphic sequences (CAPS) (Lyamichev *et al.*, *Science 260*: 778-783 (1993), the entirety of which is herein incorporated by reference). It is understood that one or more of the nucleic acids of the present invention, may be utilized as markers or probes to detect polymorphisms by RAPD or CAPS analysis.

Polymorphisms are useful, through linkage analysis, to define the genetic distances or physical distances between polymorphic traits. A physical map or ordered array of genomic DNA fragments in the desired region containing the gene may be used to characterize and isolate genes corresponding to desirable traits. For this purpose, yeast artificial chromosomes

(YACs), bacterial artificial chromosomes (BACs), and cosmids are appropriate vectors for cloning large segments of DNA molecules. Although fewer clones are needed to make a contig for a specific genomic region by using YACs (Agyare *et al., Genome Res. 7*: 1-9 (1997), the entirety of which is herein incorporated by reference; James *et al., Genomics 32*: 425-430 (1996), the entirety of which is herein incorporated by reference), chimerism in the inserted DNA fragment can arise. Cosmids are convenient for handling smaller-size DNA molecules and may be used for transformation in developing transgenic plants. BACs also carry DNA fragments and are less prone to chimerism.

Through genetic mapping, a fine scale linkage map can be developed using DNA markers and, then, a genomic DNA library of large-sized fragments can be screened with molecular markers linked to the desired trait. Molecular markers are advantageous for agronomic traits that are otherwise difficult to tag, such as resistance to pathogens, insects and nematodes, tolerance to abiotic stress, quality parameters and quantitative traits such as high yield potential.

The essential requirements for marker-assisted selection in a plant breeding program are: (1) the marker(s) should co-segregate or be closely linked with the desired trait; (2) an efficient means of screening large populations for the molecular marker(s) should be available; and (3) the screening technique should have high reproducibility across laboratories and preferably be economical to use and be user-friendly.

The genetic linkage of marker molecules can be established by a gene mapping model such as, without limitation, the flanking marker model reported by Lander and Botstein, *Genetics 121*:185-199 (1989) and the interval mapping, based on maximum likelihood methods described by Lander and Botstein, *Genetics 121*:185-199 (1989) and implemented in the software package MAPMAKER/QTL (Lincoln and Lander, *Mapping Genes Controlling Quantitative Traits Using MAPMAKER/QTL,* Whitehead Institute for Biomedical Research, Massachusetts, (1990). Additional software includes Qgene, Version 2.23 (1996), Department of Plant Breeding and Biometry, 266 Emerson Hall, Cornell University, Ithaca, NY, the manual of which is herein incorporated by reference in its entirety). Use of Qgene software is a particularly preferred approach.

A maximum likelihood estimate (MLE) for the presence of a marker is calculated, together with an MLE assuming no QTL effect, to avoid false positives. A $\log_{10}$ of an odds ratio (LOD) is then calculated as: LOD = $\log_{10}$(MLE for the presence of a QTL/MLE given no linked QTL).

The LOD score essentially indicates how much more likely the data are to have arisen assuming the presence of a QTL than in its absence. The LOD threshold value for avoiding a false positive with a given confidence, say 95%, depends on the number of markers and the length of the genome. Graphs indicating LOD thresholds are set forth in Lander and Botstein, *Genetics 121*:185-199 (1989) the entirety of which is herein incorporated by reference and further described by Arús and Moreno-González, *Plant Breeding*, Hayward *et al.*, (eds.) Chapman & Hall, London, pp. 314-331 (1993), the entirety of which is herein incorporated by reference.

Additional models can be used. Many modifications and alternative approaches to interval mapping have been reported, including the use of non-parametric methods (Kruglyak and Lander, *Genetics 139:*1421-1428 (1995), the entirety of which is herein incorporated by reference). Multiple regression methods or models can be also be used, in which the trait is regressed on a large number of markers (Jansen, *Biometrics in Plant Breeding*, van Oijen and Jansen (eds.), Proceedings of the Ninth Meeting of the Eucarpia Section Biometrics in Plant Breeding, The Netherlands, pp. 116-124 (1994); Weber and Wricke, *Advances in Plant Breeding,* Blackwell, Berlin, 16 (1994), both of which is herein incorporated by reference in their entirety). Procedures combining interval mapping with regression analysis, whereby the phenotype is regressed onto a single putative QTL at a given marker interval and at the same time onto a number of markers that serve as 'cofactors,' have been reported by Jansen and Stam, *Genetics 136*:1447-1455 (1994), the entirety of which is herein incorporated by reference and Zeng, *Genetics 136*:1457-1468 (1994) the entirety of which is herein incorporated by reference. Generally, the use of cofactors reduces the bias and sampling error of the estimated QTL positions (Utz and Melchinger, *Biometrics in Plant Breeding,* van Oijen and Jansen (eds.) Proceedings of the Ninth Meeting of the Eucarpia Section Biometrics in Plant Breeding, The Netherlands, pp.195-204 (1994), the entirety of which is herein incorporated by reference, thereby improving the precision and efficiency of QTL mapping

(Zeng, *Genetics 136*:1457-1468 (1994)). These models can be extended to multi-environment experiments to analyze genotype-environment interactions (Jansen *et al., Theo. Appl. Genet. 91*:33-37 (1995), the entirety of which is herein incorporated by reference).

Selection of an appropriate mapping population is important to map construction. The choice of an appropriate mapping population depends on the type of marker systems employed (Tanksley *et al., Molecular mapping plant chromosomes. Chromosome structure and function: Impact of new concepts,* Gustafson and Appels (eds.), Plenum Press, New York, pp 157-173 (1988), the entirety of which is herein incorporated by reference). Consideration must be given to the source of parents (adapted vs. exotic) used in the mapping population. Chromosome pairing and recombination rates can be severely disturbed (suppressed) in wide crosses (adapted x exotic) and generally yield greatly reduced linkage distances. Wide crosses will usually provide segregating populations with a relatively large array of polymorphisms when compared to progeny in a narrow cross (adapted x adapted).

An $F_2$ population is the first generation of selfing after the hybrid seed is produced. Usually a single $F_1$ plant is selfed to generate a population segregating for all the genes in Mendelian (1:2:1) fashion. Maximum genetic information is obtained from a completely classified $F_2$ population using a codominant marker system (Mather, *Measurement of Linkage in Heredity,* Methuen and Co., (1938), the entirety of which is herein incorporated by reference). In the case of dominant markers, progeny tests (e.g. $F_3$, $BCF_2$) are required to identify the heterozygotes, thus making it equivalent to a completely classified $F_2$ population. However, this procedure is often prohibitive because of the cost and time involved in progeny testing. Progeny testing of $F_2$ individuals is often used in map construction where phenotypes do not consistently reflect genotype (e.g. disease resistance) or where trait expression is controlled by a QTL. Segregation data from progeny test populations (e.g. $F_3$ or $BCF_2$) can be used in map construction. Marker-assisted selection can then be applied to cross progeny based on marker-trait map associations ($F_2$, $F_3$), where linkage groups have not been completely disassociated by recombination events (i.e., maximum disequillibrium).

Recombinant inbred lines (RIL) (genetically related lines; usually $>F_5$, developed from continuously selfing $F_2$ lines towards homozygosity) can be used as a mapping population. Information obtained from dominant markers can be maximized by using RIL because all loci

are homozygous or nearly so. Under conditions of tight linkage (i.e., about <10% recombination), dominant and co-dominant markers evaluated in RIL populations provide more information per individual than either marker type in backcross populations (Reiter *et al., Proc. Natl. Acad. Sci. (U.S.A.) 89*:1477-1481 (1992), the entirety of which is herein incorporated by reference). However, as the distance between markers becomes larger (i.e., loci become more independent), the information in RIL populations decreases dramatically when compared to codominant markers.

Backcross populations (e.g., generated from a cross between a successful variety (recurrent parent) and another variety (donor parent) carrying a trait not present in the former) can be utilized as a mapping population. A series of backcrosses to the recurrent parent can be made to recover most of its desirable traits. Thus a population is created consisting of individuals nearly like the recurrent parent but each individual carries varying amounts or mosaic of genomic regions from the donor parent. Backcross populations can be useful for mapping dominant markers if all loci in the recurrent parent are homozygous and the donor and recurrent parent have contrasting polymorphic marker alleles (Reiter *et al., Proc. Natl. Acad. Sci. (U.S.A.) 89*:1477-1481 (1992)). Information obtained from backcross populations using either codominant or dominant markers is less than that obtained from $F_2$ populations because one, rather than two, recombinant gametes are sampled per plant. Backcross populations, however, are more informative (at low marker saturation) when compared to RILs as the distance between linked loci increases in RIL populations (i.e. about 15% recombination). Increased recombination can be beneficial for resolution of tight linkages, but may be undesirable in the construction of maps with low marker saturation.

Near-isogenic lines (NIL) created by many backcrosses to produce an array of individuals that are nearly identical in genetic composition except for the trait or genomic region under interrogation can be used as a mapping population. In mapping with NILs, only a portion of the polymorphic loci are expected to map to a selected region.

Bulk segregant analysis (BSA) is a method developed for the rapid identification of linkage between markers and traits of interest (Michelmore *et al., Proc. Natl. Acad. Sci. (U.S.A.) 88*:9828-9832 (1991), the entirety of which is herein incorporated by reference). In BSA, two bulked DNA samples are drawn from a segregating population originating from a

single cross. These bulks contain individuals that are identical for a particular trait (resistant or susceptible to particular disease) or genomic region but arbitrary at unlinked regions (i.e. heterozygous). Regions unlinked to the target region will not differ between the bulked samples of many individuals in BSA.

It is understood that one or more of the nucleic acid molecules of the present invention may be used as molecular markers. It is also understood that one or more of the protein molecules of the present invention may be used as molecular markers.

In accordance with this aspect of the present invention, a sample nucleic acid is obtained from plants cells or tissues. Any source of nucleic acid may be used. Preferably, the nucleic acid is genomic DNA. The nucleic acid is subjected to restriction endonuclease digestion. For example, one or more EST nucleic acid molecule or fragment thereof can be used as a probe in accordance with the above-described polymorphic methods. The polymorphism obtained in this approach can then be cloned to identify the mutation at the coding region which alters the protein's structure or regulatory region of the gene which affects its expression level.

In one aspect of the present invention, an evaluation can be conducted to determine whether a particular mRNA molecule is present. One or more of the nucleic acid molecules of the present invention, preferably one or more of the EST nucleic acid molecules of the present invention are utilized to detect the presence or quantity of the mRNA species. Such molecules are then incubated with cell or tissue extracts of a plant under conditions sufficient to permit nucleic acid hybridization. The detection of double-stranded probe-mRNA hybrid molecules is indicative of the presence of the mRNA; the amount of such hybrid formed is proportional to the amount of mRNA. Thus, such probes may be used to ascertain the level and extent of the mRNA production in a plant's cells or tissues. Such nucleic acid hybridization may be conducted under quantitative conditions (thereby providing a numerical value of the amount of the mRNA present). Alternatively, the assay may be conducted as a qualitative assay that indicates either that the mRNA is present, or that its level exceeds a user set, predefined value.

A principle of *in situ* hybridization is that a labeled, single-stranded nucleic acid probe will hybridize to a complementary strand of cellular DNA or RNA and, under the appropriate

conditions, these molecules will form a stable hybrid. When nucleic acid hybridization is combined with histological techniques, specific DNA or RNA sequences can be identified within a single cell. An advantage of *in situ* hybridization over more conventional techniques for the detection of nucleic acids is that it allows an investigator to determine the precise spatial population (Angerer *et al., Dev. Biol. 101*: 477-484 (1984), the entirety of which is herein incorporated by reference; Angerer *et al., Dev. Biol. 112*: 157-166 (1985), the entirety of which is herein incorporated by reference; Dixon *et al., EMBO J. 10*: 1317-1324 (1991), the entirety of which is herein incorporated by reference). *In situ* hybridization may be used to measure the steady-state level of RNA accumulation. It is a sensitive technique and RNA sequences present in as few as 5-10 copies per cell can be detected (Hardin *et al., J. Mol. Biol. 202*: 417-431.(1989), the entirety of which is herein incorporated by reference). A number of protocols have been devised for *in situ* hybridization, each with tissue preparation, hybridization, and washing conditions (Meyerowitz, *Plant Mol. Biol. Rep. 5*: 242-250 (1987), the entirety of which is herein incorporated by reference; Cox and Goldberg, In: *Plant Molecular Biology: A Practical Approach* (ed. C.H. Shaw), pp. 1-35. IRL Press, Oxford (1988), the entirety of which is herein incorporated by reference; Raikhel *et al., In situ RNA hybridization in plant tissues.* In *Plant Molecular Biology Manual*, vol. B9: 1-32. Kluwer Academic Publisher, Dordrecht, Belgium (1989), the entirety of which is herein incorporated by reference).

*In situ* hybridization also allows for the localization of proteins within a tissue or cell (Wilkinson, *In Situ Hybridization,* Oxford University Press, Oxford (1992), the entirety of which is herein incorporated by reference; Langdale, *In Situ Hybridization* 165-179 In: *The Maize Handbook,* eds. Freeling and Walbot, Springer-Verlag, New York (1994), the entirety of which is herein incorporated by reference). It is understood that one or more of the molecules of the present invention, preferably one or more of the EST nucleic acid molecules of the present invention or one or more of the antibodies of the present invention may be utilized to detect the level or pattern of a protein or fragment thereof by *in situ* hybridization.

Fluorescent *in situ* hybridization also enables the localization of a particular DNA sequence along a chromosome which is useful, among other uses, for gene mapping, following chromosomes in hybrid lines or detecting chromosomes with translocations,

transversions or deletions. *In situ* hybridization has been used to identify chromosomes in several plant species (Griffor *et al., Plant Mol. Biol. 17*: 101-109 (1991), the entirety of which is herein incorporated by reference; Gustafson *et al., Proc. Nat'l. Acad. Sci. (U.S.A). 87*: 1899-1902 (1990), herein incorporated by reference; Mukai and Gill, *Genome 34*: 448-452. (1991); Schwarzacher and Heslop-Harrison, *Genome 34*: 317-323 (1991); Wang *et al., Jpn. J. Genet. 66*: 313-316 (1991), the entirety of which is herein incorporated by reference; Parra and Windle, *Nature Genetics, 5*: 17-21 (1993), the entirety of which is herein incorporated by reference). It is understood that the nucleic acid molecules of the present invention may be used as probes or markers to localize sequences along a chromosome.

It is also understood that one or more of the molecules of the present invention, preferably one or more of the EST nucleic acid molecules of the present invention or one or more of the antibodies of the present invention may be utilized to detect the expression level or pattern of a protein or mRNA thereof by *in situ* hybridization.

Another method to localize the expression of a molecule is tissue printing. Tissue printing provides a way to screen, at the same time on the same membrane many tissue sections from different plants or different developmental stages. Tissue-printing procedures utilize films designed to immobilize proteins and nucleic acids. In essence, a freshly cut section of an organ is pressed gently onto nitrocellulose paper, nylon membrane or polyvinylidene difluoride membrane. Such membranes are commercially available (e.g. Millipore, Bedford, Massachusetts). The contents of the cut cell transfer onto the membrane, and the molecules are immobilized to the membrane. The immobilized molecules form a latent print that can be visualized with appropriate probes. When a plant tissue print is made on nitrocellulose paper, the cell walls leave a physical print that makes the anatomy visible without further treatment (Varner and Taylor, *Plant Physiol. 91*: 31-33 (1989), the entirety of which is herein incorporated by reference).

Tissue printing on substrate films is described by Daoust, *Exp. Cell Res. 12*: 203-211 (1957), the entirety of which is herein incorporated by reference, who detected amylase, protease, ribonuclease, and deoxyribonuclease in animal tissues using starch, gelatin, and agar films. These techniques can be applied to plant tissues (Yomo and Taylor, *Planta 112*:35-43 (1973); Harris and Chrispeels, *Plant Physiol.* 56: 292-299 (1975). Advances in membrane

technology have increased the range of applications of Daoust's tissue-printing techniques allowing (Cassab and Varner, *J. Cell. Biol.* 105: 2581-2588 (1987), the entirety of which is herein incorporated by reference; the histochemical localization of various plant enzymes and deoxyribonuclease on nitrocellulose paper and nylon (Spruce *et al.*, *Phytochemistry, 26:* 2901-2903 (1987), the entirety of which is herein incorporated by reference; Barres *et al. Neuron 5:* 527-544 (1990), the entirety of which is herein incorporated by reference; the entirety of which is herein incorporated by reference; Reid and Pont-Lezica, *Tissue Printing: Tools for the Study of Anatomy, Histochemistry, and Gene Expression,* Academic Press, New York, New York (1992), the entirety of which is herein incorporated by reference; Reid *et al. Plant Physiol. 93:* 160-165 (1990), herein incorporate by reference; Ye *et al. Plant J. 1:* 175-183 (1991), the entirety of which is herein incorporated by reference).

It is understood that one or more of the molecules of the present invention, preferably one or more of the EST nucleic acid molecules of the present invention or one or more of the antibodies of the present invention may be utilized to detect the presence or quantity of a protein by tissue printing.

Further, it is also understood that any of the nucleic acid molecules of the present invention may be used as marker nucleic acids and or probes in connection with methods that require probes or marker nucleic acids. As used herein, a probe is an agent that is utilized to determine an attribute or feature (e.g. presence or absence, location, correlation, etc.) or a molecule, cell, tissue or plant. As used herein, a marker nucleic acid is a nucleic acid molecule that is utilized to determine an attribute or feature (e.g., presence or absence, location, correlation, etc.) or a molecule, cell, tissue or plant.

A microarray-based method for high-throughput monitoring of plant gene expression may be utilized to measure gene-specific hybridization targets. This 'chip'-based approach involves using microarrays of nucleic acid molecules as gene-specific hybridization targets to quantitatively measure expression of the corresponding plant genes (Schena *et al.*, *Science 270*: 467-470 (1995), the entirety of which is herein incorporated by reference; Shalon, Ph.D. Thesis. Stanford University (1996), the entirety of which is herein incorporated by reference). Every nucleotide in a large sequence can be queried at the same time. Hybridization can be used to efficiently analyze large amounts of nucleotide sequence.

Several microarray methods have been described. One method compares the sequences to be analyzed by hybridization to a set of oligonucleotides representing all possible subsequences (Bains and Smith, *J. Theor. Biol.* 135: 303 (1989), the entirety of which is herein incorporated by reference). A second method hybridizes the sample to an array of oligonucleotide probes. An array consisting of oligonucleotides complementary to subsequences of a target sequence can be used to determine the identity of a target sequence, measure its amount, and detect differences between the target and a reference sequence. Nucleic acid molecules microarrays may also be screened with protein molecules or fragments thereof to determine nucleic acid molecules that specifically bind protein molecules or fragments thereof.

The microarray approach may be used with polypeptide targets (U.S. Patent No. 5,445,934; U.S. Patent No: 5,143,854; U.S. Patent No. 5,079,600; U.S. Patent No. 4,923,901, all of which are herein incorporated by reference in their entirety). Essentially, polypeptides are synthesized on a substrate (microarray) and these polypeptides can be screened with either protein molecules or fragments thereof or nucleic acid molecules in order to screen for either protein molecules or fragments thereof or nucleic acid molecules that specifically bind the target polypeptides. Implementation of these techniques rely on recently developed combinatorial technologies to generate any ordered array of a large number of oligonucleotide probes (Fodor *et al.*, *Science 251*:767-773 (1991), the entirety of which is herein incorporated by reference).

It is understood that one or more of the molecules of the present invention, preferably one or more of the nucleic acid molecules or protein molecules or fragments thereof of the present invention may be utilized in a microarray based method.

In a preferred embodiment of the present invention microarrays may be prepared that comprise nucleic acid molecules where preferably at least 10%, preferably at least 25%, more preferably at least 50% and even more preferably at least 75%, 80%, 85%, 90% or 95% of the nucleic acid molecules located on that array are selected from the group of nucleic acid molecules that specifically hybridize to one or more nucleic acid molecule having a nucleic acid sequence selected from the group of SEQ ID NO: 1 through SEQ ID NO: 10952 or complement thereof or fragments of either.

A particular preferred microarray embodiment of the present invention is a microarray comprising nucleic acid molecules encoding genes or fragments thereof that are homologues of known genes or nucleic acid molecules that comprise genes or fragment thereof that elicit only limited or no matches to known genes. A further preferred microarray embodiment of the present invention is a microarray comprising nucleic acid molecules having genes or fragments thereof that are homologues of known genes and nucleic acid molecules that comprise genes or fragment thereof that elicit only limited or no matches to known genes. Site-directed mutagenesis may be utilized to modify nucleic acid sequences, particularly as it is a technique that allows one or more of the amino acids encoded by a nucleic acid molecule to be altered (e.g. a threonine to be replaced by a methionine). Three basic methods for site-directed mutagenesis are often employed. These are cassette mutagenesis (Wells *et al.*, *Gene 34*:315-23 (1985), the entirety of which is herein incorporated by reference), primer extension (Gilliam *et al.*, *Gene 12*:129-137 (1980), the entirety of which is herein incorporated by reference); Zoller and Smith, *Methods Enzymol. 100*:468-500 (1983), the entirety of which is herein incorporated by reference; and Dalbadie-McFarland *et al., Proc. Natl. Acad. Sci. (U.S.A.) 79*:6409-6413 (1982), the entirety of which is herein incorporated by reference) and methods based upon PCR (Scharf *et al., Science 233*:1076-1078 (1986), the entirety of which is herein incorporated by reference; Higuchi *et al., Nucleic Acids Res. 16*:7351-7367 (1988), the entirety of which is herein incorporated by reference). Site-directed mutagenesis approaches are also described in European Patent 0 385 962, the entirety of which is herein incorporated by reference, European Patent 0 359 472, the entirety of which is herein incorporated by reference, and PCT Patent Application WO 93/07278, the entirety of which is herein incorporated by reference.

Site-directed mutagenesis strategies have been applied to plants for both *in vitro* as well as *in vivo* site-directed mutagenesis (Lanz *et al., J. Biol. Chem.* 266:9971-6 (1991), the entirety of which is herein incorporated by reference; Kovgan and Zhdanov, *Biotekhnologiya 5*:148-154; No. 207160n, Chemical Abstracts 110:225 (1989), the entirety of which is herein incorporated by reference; Ge *et al., Proc. Natl. Acad. Sci. (U.S.A.) 86*:4037-4041 (1989), the entirety of which is herein incorporated by reference,

Zhu *et al., J. Biol. Chem. 271*:18494-18498 (1996), Chu *et al., Biochemistry 33*:6150-6157 (1994), the entirety of which is herein incorporated by reference, Small *et al., EMBO J. 11*:1291-1296 (1992), the entirety of which is herein incorporated by reference, Cho *et al., Mol. Biotechnol. 8*:13-16 (1997), Kita *et al., J. Biol. Chem. 271*:26529-26535 (1996), the entirety of which is herein incorporated by reference, Jin *et al., Mol. Microbiol. 7*:555-562 (1993), the entirety of which is herein incorporated by reference, Hatfield and Vierstra, *J. Biol. Chem. 267*:14799-14803 (1992), the entirety of which is herein incorporated by reference, Zhao *et al., Biochemistry 31*:5093-5099 (1992), the entirety of which is herein incorporated by reference).

Any of the nucleic acid molecules of the present invention may either be modified by site-directed mutagenesis or used as, for example, nucleic acid molecules that are used to target other nucleic acid molecules for modification. It is understood that mutants with more than one altered nucleotide can be constructed using techniques that practitioners skilled in the art are familiar with such as isolating restriction fragments and ligating such fragments into an expression vector (*see*, for example, Sambrook *et al., Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Press (1989)).

Sequence-specific DNA-binding proteins play a role in the regulation of transcription. The isolation of recombinant cDNAs encoding these proteins facilitates the biochemical analysis of their structural and functional properties. Genes encoding such DNA-binding proteins have been isolated using classical genetics (Vollbrecht *et al., Nature 350*: 241-243 (1991), the entirety of which is herein incorporated by reference) and molecular biochemical approaches, including the screening of recombinant cDNA libraries with antibodies (Landschulz *et al., Genes Dev. 2*: 786-800 (1988), the entirety of which is herein incorporated by reference) or DNA probes (Bodner *et al., Cell 55*: 505-518 (1988), the entirety of which is herein incorporated by reference). In addition, an *in situ* screening procedure has been used and has facilitated the isolation of sequence-specific DNA-binding proteins from various plant species (Gilmartin *et al., Plant Cell 4*: 839-849 (1992), the entirety of which is herein incorporated by reference; Schindler *et al., EMBO J. 11*: 1261-1273 (1992) the entirety of which is herein incorporated by reference). An *in situ* screening protocol does not require the purification of the protein of interest (Vinson et al., *Genes Dev. 2*: 801-806 (1988), the

entirety of which is herein incorporated by reference; Singh *et al., Cell 52*: 415-423 (1988), the entirety of which is herein incorporated by reference).

Steps may be employed to characterize DNA-protein interactions. The first is to identify promoter fragments that interact with DNA-binding proteins, to titrate binding activity, to determine the specificity of binding, and to determine whether a given DNA-binding activity can interact with related DNA sequences (Sambrook *et al., Molecular Cloning: A Laboratory Manual*, 2nd edition. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York (1989). Electrophoretic mobility-shift assay is a widely used assay. The assay provides a simple, rapid, and sensitive method for detecting DNA-binding proteins based on the observation that the mobility of a DNA fragment through a nondenaturing, low-ionic strength polyacrylamide gel is retarded upon association with a DNA-binding protein (Fried and Crother, *Nucleic Acids Res. 9*: 6505-6525 (1981), the entirety of which is herein incorporated by reference). When one or more specific binding activities have been identified, the exact sequence of the DNA bound by the protein may be determined. Several procedures for characterizing protein/DNA-binding sites are used, including methylation and ethylation interference assays ( Maxam and Gilbert, *Methods Enzymol. 65*: 499-560 (1980), the entirety of which is herein incorporated by reference; Wissman and Hillen, *Methods Enzymol. 208*: 365-379 (1991), the entirety of which is herein incorporated by reference) and footprinting techniques employing DNase I (Galas and Schmitz, *Nucleic Acids Res. 5*: 3157-3170 (1978), the entirety of which is herein incorporated by reference), 1,10-phenanthroline-copper ion methods (Sigman *et al., Methods Enzymol. 208*: 365-379 (1991), the entirety of which is herein incorporated by reference) or hydroxyl radical methods (Dixon *et al., Methods Enzymol. 208*: 380-413 (1991), the entirety of which is herein incorporated by reference). It is understood that one or more of the nucleic acid molecules of the present invention, preferably one or more of the EST nucleic acid molecules of the present invention may be utilized to identify a protein or fragment thereof that specifically binds to a nucleic acid molecule of the present invention. It is also understood that one or more of the protein molecules or fragments thereof of the present invention may be utilized to identify a nucleic acid molecule that specifically binds to it.

The two-hybrid system is based on the fact that many cellular functions are carried out by proteins that interact (physically) with one another. Two-hybrid systems have been used to probe the function of new proteins (Chien *et al., Proc. Natl. Acad. Sci. (U.S.A.) 88*: 9578-9582 (1991) the entirety of which is herein incorporated by reference; Durfee *et al., Genes Dev. 7*: 555-569 (1993) the entirety of which is herein incorporated by reference; Choi *et al., Cell 78*: 499-512 (1994), the entirety of which is herein incorporated by reference; Kranz *et al., Genes Dev. 8:* 313-327 (1994), the entirety of which is herein incorporated by reference).

Interaction mating techniques have facilitated a number of two-hybrid studies of protein-protein interaction. Interaction mating has been used to examine interactions between small sets of tens of proteins (Finley and Brent, *Proc. Natl. Acad. Sci. (U.S.A.) 91*: 12098-12984 (1994), the entirety of which is herein incorporated by reference), larger sets of hundreds of proteins, (Bendixen *et al., Nucl. Acids Res. 22*: 1778-1779 (1994), the entirety of which is herein incorporated by reference) and to comprehensively map proteins encoded by a small genome (Bartel et al., *Nature Genetics 12*: 72-77 (1996), the entirety of which is herein incorporated by reference). This technique utilizes proteins fused to the DNA-binding domain and proteins fused to the activation domain. They are expressed in two different haploid yeast strains of opposite mating type, and the strains are mated to determine if the two proteins interact. Mating occurs when haploid yeast strains come into contact and result in the fusion of the two haploids into a diploid yeast strain. An interaction can be determined by the activation of a two-hybrid reporter gene in the diploid strain. The primary advantage of this technique is that it reduces the number of yeast transformations needed to test individual interactions. It is understood that the protein-protein interactions of protein or fragments thereof of the present invention may be investigated using the two-hybrid system and that any of the nucleic acid molecules of the present invention that encode such proteins or fragments thereof may be used to transform yeast in the two-hybrid system.

*Synechocystis* 6803 is a photosynthetic Cyanobacterium capable of oxygenic photosynthesis as well as heterotrophic growth in the absence of light. The entire genome has been sequenced, and it is reported to have a circular genome size of 3.57 Mbp containing 3168 potential open reading frames. Open reading frames (ORFs) were identified based upon their homology to other reported ORFs and by using ORF identification computer programs. Sixteen hundred potential ORFs were assigned

based on their homology to previously identified ORFs. Of these 1600 ORFs, 145 were identical to reported ORFs (Kaneko *et al.,DNA Research 3*:109-36 (1996), herein incorporated by reference in its entirety).

Several prokaryote promoters have been used in *Synechocystis* to express heterologous genes including the tac, lac, and lambda phage promoters (Bryant (ed.), *The Molecular Biology of Cyanobacteria*, Kluwer Academic Publishers, (1994); Ferino and Chauvat, *Gene 84*:257-266 (1989), both of which are herein incorporated by reference in their entirety). Several bacterial origins of replication such as RSF1010 and ACYC are reported to replicate in *Synechocystis* (Mermet-Bouvier and Chauvat, *Current Microbiology 28*:145-148 (1994); Kuhlemeier *et al., Mol. Gen. Genet. 184*:249-254 (1981), both of which are herein incorporated by reference in their entirety).

*Synechocystis* has been used to study gene regulation by gene replacement through homologous recombination or by gene disruption using antibiotic resistance markers (Pakrasi *et al.,EMBO 7*:325-332 (1988), herein incorporated by reference in its entirety). In such gene regulation studies, double reciprocal homologous regions of the host genome flanking the gene of interest recombine to stably integrate the gene of interest into the genome. The gene of interest can be expressed once that gene has been stably integrated into the genome. Biochemical analysis can be performed to study the effect of the replaced or deleted gene.

It is understood that the agents of the present invention may be employed in a *Synechocystis* system.

Exogenous genetic material may be transferred into a plant cell and the plant cell regenerated into a whole, fertile or sterile plant. Exogenous genetic material is any genetic material, whether naturally occurring or otherwise, from any source that is capable of being inserted into any organism. Such genetic material may be transferred into either monocotyledons and dicotyledons including but not limited to the crops, maize and soybean (*See specifically,* Chistou, *Particle Bombardment for Genetic Engineering of Plants,* pp 63-69 (maize), pp50-60 (soybean), Biotechnology Intelligence Unit. Academic Press, San Diego, California (1996), the entirety of which is herein incorporated by reference and generally Chistou, *Particle Bombardment for Genetic Engineering of Plants,* Biotechnology Intelligence Unit. Academic Press, San Diego, California (1996), the entirety of which is herein incorporated by reference).

Transfer of a nucleic acid that encodes for a protein can result in overexpression of that protein in a transformed cell or transgenic plant. One or more of the proteins or fragments thereof encoded by nucleic acid molecules of the present invention may be overexpressed in a transformed cell or transformed plant. Such overexpression may be the result of transient or stable transfer of the exogenous material.

Exogenous genetic material may be transferred into a plant cell by the use of a DNA vector or construct designed for such a purpose. Design of such a vector is generally within the skill of the art (*See*, Plant Molecular Biology: A Laboratory Manual eds. Clark, Springer, New York (1997), the entirety of which is herein incorporated by reference).

A construct or vector may include a plant promoter to express the protein or protein fragment of choice. A number of promoters which are active in plant cells have been described in the literature. These include the nopaline synthase (NOS) promoter (Ebert *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 84*:5745-5749 (1987), the entirety of which is herein incorporated by reference), the octopine synthase (OCS) promoter (which are carried on tumor-inducing plasmids of *Agrobacterium tumefaciens*), the caulimovirus promoters such as the cauliflower mosaic virus (CaMV) 19S promoter (Lawton *et al.*, *Plant Mol. Biol. 9*:315-324 (1987), the entirety of which is herein incorporated by reference) and the CAMV 35S promoter (Odell *et al.*, *Nature 313*:810-812 (1985), the entirety of which is herein incorporated by reference), the figwort mosaic virus 35S-promoter, the light-inducible promoter from the small subunit of ribulose-1,5-bis-phosphate carboxylase (ssRUBISCO), the Adh promoter (Walker *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 84*:6624-6628 (1987), the entirety of which is herein incorporated by reference), the sucrose synthase promoter (Yang *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 87*:4144-4148 (1990), the entirety of which is herein incorporated by reference), the R gene complex promoter (Chandler *et al.*, *The Plant Cell 1*:1175-1183 (1989), the entirety of which is herein incorporated by reference), and the chlorophyll a/b binding protein gene promoter, etc. These promoters have been used to create DNA constructs which have been expressed in plants; *see*, *e.g.*, PCT publication WO 84/02913, herein incorporated by reference in its entirety.

Promoters which are known or are found to cause transcription of DNA in plant cells can be used in the present invention. Such promoters may be obtained from a variety of

sources such as plants and plant viruses. It is preferred that the particular promoter selected should be capable of causing sufficient expression to result in the production of an effective amount of a protein to cause the desired phenotype. In addition to promoters which are known to cause transcription of DNA in plant cells, other promoters may be identified for use in the current invention by screening a plant cDNA library for genes which are selectively or preferably expressed in the target tissues or cells.

For the purpose of expression in source tissues of the plant, such as the leaf, seed, root or stem, it is preferred that the promoters utilized in the present invention have relatively high expression in these specific tissues. For this purpose, one may choose from a number of promoters for genes with tissue- or cell-specific or -enhanced expression. Examples of such promoters reported in the literature include the chloroplast glutamine synthetase GS2 promoter from pea (Edwards *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 87*:3459-3463 (1990), herein incorporated by reference in its entirety), the chloroplast fructose-1,6-biphosphatase (FBPase) promoter from wheat (Lloyd *et al.*, *Mol. Gen. Genet. 225*:209-216 (1991), herein incorporated by reference in its entirety), the nuclear photosynthetic ST-LS1 promoter from potato (Stockhaus *et al.*, *EMBO J. 8*:2445-2451 (1989), herein incorporated by reference in its entirety), the phenylalanine ammonia-lyase (PAL) promoter and the chalcone synthase (CHS) promoter from *Arabidopsis thaliana*. Also reported to be active in photosynthetically active tissues are the ribulose-1,5-bisphosphate carboxylase (RbcS) promoter from eastern larch (*Larix laricina*), the promoter for the *cab* gene, cab6, from pine (Yamamoto *et al.*, *Plant Cell Physiol. 35*:773-778 (1994), herein incorporated by reference in its entirety), the promoter for the Cab-1 gene from wheat (Fejes *et al.*, *Plant Mol. Biol. 15*:921-932 (1990), herein incorporated by reference in its entirety), the promoter for the CAB-1 gene from spinach (Lubberstedt *et al.*, *Plant Physiol. 104*:997-1006 (1994), herein incorporated by reference in its entirety), the promoter for the cab1R gene from rice (Luan *et al.*, *Plant Cell. 4*:971-981 (1992), the entirety of which is herein incorporated by reference), the pyruvate, orthophosphate dikinase (PPDK) promoter from maize (Matsuoka *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 90*: 9586-9590 (1993), herein incorporated by reference in its entirety), the promoter for the tobacco Lhcb1*2 gene (Cerdan *et al.*, *Plant Mol. Biol. 33*: 245-255. (1997), herein incorporated by reference in its entirety), the *Arabidopsis thaliana* SUC2 sucrose-H+

symporter promoter (Truernit *et al.*, *Planta. 196*: 564-570 (1995), herein incorporated by reference in its entirety), and the promoter for the thylacoid membrane proteins from spinach (psaD, psaF, psaE, PC, FNR, atpC, atpD, cab, rbcS). Other promoters for the chlorophyl a/b-binding proteins may also be utilized in the present invention, such as the promoters for LhcB gene and PsbP gene from white mustard (*Sinapis alba*; Kretsch *et al.*, *Plant Mol. Biol. 28*: 219-229 (1995), the entirety of which is herein incorporated by reference).

For the purpose of expression in sink tissues of the plant, such as the tuber of the potato plant, the fruit of tomato, or the seed of maize, wheat, rice, and barley, it is preferred that the promoters utilized in the present invention have relatively high expression in these specific tissues. A number of promoters for genes with tuber-specific or -enhanced expression are known, including the class I patatin promoter (Bevan *et al.*, *EMBO J. 8*: 1899-1906 (1986); Jefferson *et al.*, *Plant Mol. Biol. 14*: 995-1006 (1990), both of which are herein incorporated by reference in its entirety), the promoter for the potato tuber ADPGPP genes, both the large and small subunits, the sucrose synthase promoter (Salanoubat and Belliard, *Gene. 60*: 47-56 (1987), Salanoubat and Belliard, *Gene. 84*: 181-185 (1989), both of which are incorporated by reference in their entirety), the promoter for the major tuber proteins including the 22 kd protein complexes and proteinase inhibitors (Hannapel, *Plant Physiol. 101*: 703-704 (1993), herein incorporated by reference in its entirety), the promoter for the granule bound starch synthase gene (GBSS) (Visser *et al.*, *Plant Mol. Biol. 17*: 691-699 (1991), herein incorporated by reference in its entirety), and other class I and II patatins promoters (Koster-Topfer *et al.*, *Mol Gen Genet. 219*: 390-396 (1989); Mignery *et al.*, *Gene. 62*: 27-44 (1988), both of which are herein incorporated by reference in their entirety).

Other promoters can also be used to express a fructose 1,6 bisphosphate aldolase gene in specific tissues, such as seeds or fruits. The promoter for β-conglycinin (Chen *et al.*, *Dev. Genet. 10*: 112-122 (1989), herein incorporated by reference in its entirety) or other seed-specific promoters such as the napin and phaseolin promoters, can be used. The zeins are a group of storage proteins found in maize endosperm. Genomic clones for zein genes have been isolated (Pedersen *et al.*, *Cell 29*: 1015-1026 (1982), herein incorporated by reference in its entierty), and the promoters from these clones, including the 15 kD, 16 kD, 19 kD, 22 kD, 27 kD, and gamma genes, could also be used. Other promoters known to function, for

example, in maize, include the promoters for the following genes: *waxy, Brittle, Shrunken 2,* Branching enzymes I and II, starch synthases, debranching enzymes, oleosins, glutelins, and sucrose synthases. A particularly preferred promoter for maize endosperm expression is the promoter for the glutelin gene from rice, more particularly the Osgt-1 promoter (Zheng *et al.*, *Mol. Cell Biol. 13*: 5829-5842 (1993), herein incorporated by reference in its entirety). Examples of promoters suitable for expression in wheat include those promoters for the ADPglucose pyrophosphorylase (ADPGPP) subunits, the granule bound and other starch synthases, the branching and debranching enzymes, the embryogenesis-abundant proteins, the gliadins, and the glutenins. Examples of such promoters in rice include those promoters for the ADPGPP subunits, the granule bound and other starch synthases, the branching enzymes, the debranching enzymes, sucrose synthases, and the glutelins. A particularly preferred promoter is the promoter for rice glutelin, Osgt-1. Examples of such promoters for barley include those for the ADPGPP subunits, the granule bound and other starch synthases, the branching enzymes, the debranching enzymes, sucrose synthases, the hordeins, the embryo globulins, and the aleurone specific proteins.

Root specific promoters may also be used. An example of such a promoter is the promoter for the acid chitinase gene (Samac *et al.*, *Plant Mol. Biol. 25*: 587-596 (1994), the entirety of which is herein incorporated by reference). Expression in root tissue could also be accomplished by utilizing the root specific subdomains of the CaMV35S promoter that have been identified (Lam *et al.*, *Proc. Natl. Acad. Sci. (U.S.A.) 86*:7890-7894 (1989), herein incorporated by reference in its entirety). Other root cell specific promoters include those reported by Conkling *et al.* (Conkling *et al.*, *Plant Physiol. 93*:1203-1211 (1990), the entirety of which is herein incorporated by reference).

Additional promoters that may be utilized are described, for example, in U.S. Patent Nos. 5,378,619, 5,391,725, 5,428,147, 5,447,858, 5,608,144, 5,608,144, 5,614,399, 5,633,441, 5,633,435, and 4,633,436, all of which are herein incorporated in their entirety. In addition, a tissue specific enhancer may be used (Fromm *et al.*, *The Plant Cell 1*:977-984 (1989), the entirety of which is herein incorporated by reference).

Constructs or vectors may also include, with the coding region of interest, a nucleic acid sequence that acts, in whole or in part, to terminate transcription of that region. For

example, such sequences have been isolated including the Tr7 3' sequence and the nos 3' sequence (Ingelbrecht *et al.*, *The Plant Cell 1*:671-680 (1989), the entirety of which is herein incorporated by reference; Bevan *et al.*, *Nucleic Acids Res. 11*:369-385 (1983), the entirety of which is herein incorporated by reference), or the like.

A vector or construct may also include regulatory elements. Examples of such include the Adh intron 1 (Callis *et al.*, *Genes and Develop. 1*:1183-1200 (1987), the entirety of which is herein incorporated by reference), the sucrose synthase intron (Vasil et al., Plant Physiol. 91:1575-1579 (1989), the entirety of which is herein incorporated by reference) and the TMV omega element (Gallie *et al.*, *The Plant Cell 1*:301-311 (1989), the entirety of which is herein incorporated by reference). These and other regulatory elements may be included when appropriate.

A vector or construct may also include a selectable marker. Selectable markers may also be used to select for plants or plant cells that contain the exogenous genetic material. Examples of such include, but are not limited to, a neo gene (Potrykus *et al.*, *Mol. Gen. Genet. 199*:183-188 (1985), the entirety of which is herein incorporated by reference) which codes for kanamycin resistance and can be selected for using kanamycin, G418, etc.; a bar gene which codes for bialaphos resistance; a mutant EPSP synthase gene (Hinchee *et al.*, *Bio/Technology 6*:915-922 (1988), the entirety of which is herein incorporated by reference) which encodes glyphosate resistance; a nitrilase gene which confers resistance to bromoxynil (Stalker *et al.*, *J. Biol. Chem. 263*:6310-6314 (1988), the entirety of which is herein incorporated by reference); a mutant acetolactate synthase gene (ALS) which confers imidazolinone or sulphonylurea resistance (European Patent Application 154,204 (Sept. 11, 1985), the entirety of which is herein incorporated by reference); and a methotrexate resistant DHFR gene (Thillet *et al.*, *J. Biol. Chem. 263*:12500-12508 (1988), the entirety of which is herein incorporated by reference).

A vector or construct may also include a transit peptide. Incorporation of a suitable chloroplast transit peptide may also be employed (European Patent Application Publication Number 0218571, the entirety of which is herein incorporated by reference). Translational enhancers may also be incorporated as part of the vector DNA. DNA constructs could contain one or more 5' non-translated leader sequences which may serve to enhance expression of the

gene products from the resulting mRNA transcripts. Such sequences may be derived from the promoter selected to express the gene or can be specifically modified to increase translation of the mRNA. Such regions may also be obtained from viral RNAs, from suitable eukaryotic genes, or from a synthetic gene sequence. For a review of optimizing expression of transgenes, see Koziel *et al., Plant Mol. Biol. 32*:393-405 (1996), the entirety of which is herein incorporated by reference.

A vector or construct may also include a screenable marker. Screenable markers may be used to monitor expression. Exemplary screenable markers include a β-glucuronidase or uidA gene (GUS) which encodes an enzyme for which various chromogenic substrates are known (Jefferson, *Plant Mol. Biol, Rep. 5:* 387-405 (1987), the entirety of which is herein incorporated by reference; Jefferson *et al., EMBO J. 6:* 3901-3907 (1987), the entirety of which is herein incorporated by reference); an R-locus gene, which encodes a product that regulates the production of anthocyanin pigments (red color) in plant tissues ((Dellaporta *et al.*, Stadler Symposium *11*:263-282 (1988), the entirety of which is herein incorporated by reference); a β-lactamase gene (Sutcliffe *et al., Proc. Natl. Acad. Sci. (U.S.A.) 75*: 3737-3741 (1978), the entirety of which is herein incorporated by reference), a gene which encodes an enzyme for which various chromogenic substrates are known (e.g., PADAC, a chromogenic cephalosporin); a luciferase gene (Ow *et al., Science 234*: 856-859 (1986), the entirety of which is herein incorporated by reference) a xylE gene (Zukowsky *et al., Proc. Natl. Acad. Sci. (U.S.A.) 80*:1101-1105 (1983), the entirety of which is herein incorporated by reference) which encodes a catechol diozygenase that can convert chromogenic catechols; an α-amylase gene (Ikatu *et al., Bio/Technol. 8*:241-242 (1990), the entirety of which is herein incorporated by reference); a tyrosinase gene (Katz *et al., J. Gen. Microbiol. 129*:2703-2714 (1983), the entirety of which is herein incorporated by reference) which encodes an enzyme capable of oxidizing tyrosine to DOPA and dopaquinone which in turn condenses to melanin; an α-galactosidase, which will turn a chromogenic α-galactose substrate.

Included within the terms "selectable or screenable marker genes" are also genes which encode a scriptable marker whose secretion can be detected as a means of identifying or selecting for transformed cells. Examples include markers which encode a secretable antigen that can be identified by antibody interaction, or even secretable enzymes which can

be detected catalytically. Secretable proteins fall into a number of classes, including small, diffusible proteins detectable, *e.g.,* by ELISA, small active enzymes detectable in extracellular solution (*e.g.,* α-amylase, β-lactamase, phosphinothricin transferase), or proteins which are inserted or trapped in the cell wall (such as proteins which include a leader sequence such as that found in the expression unit of extension or tobacco PR-S). Other possible selectable and/or screenable marker genes will be apparent to those of skill in the art.

Methods and compositions for transforming a bacteria and other microorganisms are known in the art (see for example Sambrook *et al., Molecular Cloning: A Laboratory Manual*, Second Edition, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y., (1989), the entirety of which is herein incorporated by reference).

There are many methods for introducing transforming nucleic acid molecules into plant cells. Suitable methods are believed to include virtually any method by which nucleic acid molecules may be introduced into a cell, such as by *Agrobacterium* infection or direct delivery of nucleic acid molecules such as, for example, by PEG-mediated transformation, by electroporation or by acceleration of DNA coated particles, etc. (Pottykus, *Ann. Rev. Plant Physiol. Plant Mol. Biol. 42*:205-225 (1991), the entirety of which is herein incorporated by reference; Vasil, *Plant Mol. Biol. 25*: 925-937 (1994), the entirety of which is herein incorporated by reference. For example, electroporation has been used to transform maize protoplasts (Fromm *et al., Nature 312*:791-793 (1986), the entirety of which is herein incorporated by reference).

Other vector systems suitable for introducing transforming DNA into a host plant cell includes but is not limited to binary artificial chromosome (BIBAC) vectors (Hamilton *et al., Gene 200*:107-116, (1997), the entirety of which is herein incorporated by reference, and transfection with RNA viral vectors (Della-Cioppa *et al., Ann. N.Y. Acad. Sci.* (1996), 792 (Engineering Plants for Commercial Products and Applications), 57-61, the entirety of which is herein incorporated by reference.

Technology for introduction of DNA into cells is well known to those of skill in the art. Four general methods for delivering a gene into cells have been described: (1) chemical methods (Graham and van der Eb, *Virology, 54*:536-539 (1973), the entirety of which is herein incorporated by reference); (2) physical methods such as microinjection (Capecchi,

*Cell 22*:479-488 (1980), electroporation (Wong and Neumann, *Biochem. Biophys. Res. Commun., 107*:584-587 (1982); Fromm *et al., Proc. Natl. Acad. Sci. USA*, 82:5824-5828 (1985); U. S. Patent No. 5,384,253; and the gene gun (Johnston and Tang, *Methods Cell Biol. 43*:353-365 (1994), all of which the entirety is herein incorporated by reference; (3) viral vectors (Clapp, *Clin. Perinatol., 20*:155-168 (1993); Lu *et al., J. Exp. Med., 178*:2089-2096 (1993); Eglitis and Anderson, *Biotechniques, 6*:608-614 (1988), all of which the entirety is herein incorporated by reference); and (4) receptor-mediated mechanisms (Curiel *et al., Hum. Gen. Ther., 3*:147-154 (1992); Wagner *et al., Proc. Natl. Acad. Sci. USA, 89*:6099-6103 (1992), all of which the entirety is herein incorporated by reference).

Acceleration methods that may be used include, for example, microprojectile bombardment and the like. One example of a method for delivering transforming nucleic acid molecules to plant cells is microprojectile bombardment. This method has been reviewed by Yang and Christou, eds., *Particle Bombardment Technology for Gene Transfer*, Oxford Press, Oxford, England (1994), the entirety of which is herein incorporated by reference). Non-biological particles (microprojectiles) that may be coated with nucleic acids and delivered into cells by a propelling force. Exemplary particles include those comprised of tungsten, gold, platinum, and the like.

A particular advantage of microprojectile bombardment, in addition to it being an effective means of reproducibly, and stably transforming monocotyledons, is that neither the isolation of protoplasts (Cristou *et al., Plant Physiol. 87*:671-674 (1988), the entirety of which is herein incorporated by reference) nor the susceptibility of *Agrobacterium* infection is required. An illustrative embodiment of a method for delivering DNA into maize cells by acceleration is a biolistics g-particle delivery system, which can be used to propel particles coated with DNA through a screen, such as a stainless steel or Nytex screen, onto a filter surface covered with corn cells cultured in suspension. Gordon-Kamm *et al.,* describes the basic procedure for coating tungsten particles with DNA (Gordon-Kamm *et al., Plant Cell 2*: 603-618 (1990), the entirety of which is herein incorporated by reference). The screen disperses the tungsten nucleic acid particles so that they are not delivered to the recipient cells in large aggregates. A particle delivery system suitable for use with the present invention is the helium acceleration PDS-1000/He gun which is available from Bio-Rad Laboratories

(Bio-Rad, Hercules, California)(Sanford *et al.*, *Technique 3*:3-16 (1991), the entirety of which is herein incorporated by reference).

For the bombardment, cells in suspension may be concentrated on filters. Filters containing the cells to be bombarded are positioned at an appropriate distance below the microprojectile stopping plate. If desired, one or more screens are also positioned between the gun and the cells to be bombarded.

Alternatively, immature embryos or other target cells may be arranged on solid culture medium. The cells to be bombarded are positioned at an appropriate distance below the macroprojectile stopping plate. If desired, one or more screens are also positioned between the acceleration device and the cells to be bombarded. Through the use of techniques set forth herein one may obtain up to 1000 or more foci of cells transiently expressing a marker gene. The number of cells in a focus which express the exogenous gene product 48 hours post-bombardment often range from one to ten and average one to three.

In bombardment transformation, one may optimize the prebombardment culturing conditions and the bombardment parameters to yield the maximum numbers of stable transformants. Both the physical and biological parameters for bombardment are important in this technology. Physical factors are those that involve manipulating the DNA/microprojectile precipitate or those that affect the flight and velocity of either the macro- or microprojectiles. Biological factors include all steps involved in manipulation of cells before and immediately after bombardment, the osmotic adjustment of target cells to help alleviate the trauma associated with bombardment, and also the nature of the transforming DNA, such as linearized DNA or intact supercoiled plasmids. It is believed that pre-bombardment manipulations are especially important for successful transformation of immature embryos. In another alternative embodiment, plastids can be stably transformed. Methods disclosed for plastid transformation in higher plants include the particle gun delivery of DNA containing a selectable marker and targeting of the DNA to the plastid genome through homologous recombination (Svab *et al., Proc. Natl. Acad. Sci. (U.S.A.) 87*:8526-8530 (1990); Svab and Maliga, *Proc. Natl. Acad. Sci. (U.S.A.) 90*:913-917 (1993); Staub and Maliga, *EMBO J. 12*:601-606 (1993); U.S. Patents 5, 451,513 and 5,545,818, all of which are herein incorporated by reference in their entirety).

Accordingly, it is contemplated that one may wish to adjust various aspects of the bombardment parameters in small scale studies to fully optimize the conditions. One may particularly wish to adjust physical parameters such as gap distance, flight distance, tissue distance, and helium pressure. One may also minimize the trauma reduction factors by modifying conditions which influence the physiological state of the recipient cells and which may therefore influence transformation and integration efficiencies. For example, the osmotic state, tissue hydration and the subculture stage or cell cycle of the recipient cells may be adjusted for optimum transformation. The execution of other routine adjustments will be known to those of skill in the art in light of the present disclosure.

*Agrobacterium*-mediated transfer is a widely applicable system for introducing genes into plant cells because the DNA can be introduced into whole plant tissues, thereby bypassing the need for regeneration of an intact plant from a protoplast. The use of *Agrobacterium*-mediated plant integrating vectors to introduce DNA into plant cells is well known in the art. See, for example the methods described (Fraley *et al., Biotechnology 3*:629-635 (1985); Rogers *et al., Meth. In Enzymol, 153*:253-277 (1987), both of which are herein incorporated by reference in their entirety. Further, the integration of the Ti-DNA is a relatively precise process resulting in few rearrangements. The region of DNA to be transferred is defined by the border sequences, and intervening DNA is usually inserted into the plant genome as described (Spielmann *et al., Mol. Gen. Genet., 205*:34 (1986), the entirety of which is herein incorporated by reference).

Modern *Agrobacterium* transformation vectors are capable of replication in *E. coli* as well as *Agrobacterium*, allowing for convenient manipulations as described (Klee *et al., In: Plant DNA Infectious Agents*, T. Hohn and J. Schell, eds., Springer-Verlag, New York, pp. 179-203 (1985), the entirety of which is herein incorporated by reference. Moreover, recent technological advances in vectors for *Agrobacterium*-mediated gene transfer have improved the arrangement of genes and restriction sites in the vectors to facilitate construction of vectors capable of expressing various polypeptide coding genes. The vectors described have convenient multi-linker regions flanked by a promoter and a polyadenylation site for direct expression of inserted polypeptide coding genes and are suitable for present purposes (Rogers *et al., Meth. In Enzymol., 153*:253-277 (1987), the entirety of which is herein incorporated by

reference). In addition, *Agrobacterium* containing both armed and disarmed Ti genes can be used for the transformations. In those plant strains where *Agrobacterium*-mediated transformation is efficient, it is the method of choice because of the facile and defined nature of the gene transfer.

A transgenic plant formed using *Agrobacterium* transformation methods typically contains a single gene on one chromosome. Such transgenic plants can be referred to as being heterozygous for the added gene. More preferred is a transgenic plant that is homozygous for the added structural gene; *i.e.*, a transgenic plant that contains two added genes, one gene at the same locus on each chromosome of a chromosome pair. A homozygous transgenic plant can be obtained by sexually mating (selfing) an independent segregant transgenic plant that contains a single added gene, germinating some of the seed produced and analyzing the resulting plants produced for the gene of interest.

It is also to be understood that two different transgenic plants can also be mated to produce offspring that contain two independently segregating added, exogenous genes. Selfing of appropriate progeny can produce plants that are homozygous for both added, exogenous genes that encode a polypeptide of interest. Back-crossing to a parental plant and out-crossing with a non-transgenic plant are also contemplated, as is vegetative propagation.

Transformation of plant protoplasts can be achieved using methods based on calcium phosphate precipitation, polyethylene glycol treatment, electroporation, and combinations of these treatments. See for example (Potrykus *et al., Mol. Gen. Genet., 205*:193-200 (1986); Lorz *et al., Mol. Gen. Genet., 199*:178, (1985); Fromm *et al., Nature, 319*:791,(1986); Uchimiya *et al., Mol. Gen. Genet.*:204:204, (1986); Callis *et al., Genes and Development, 1183*,(1987); Marcotte *et al., Nature, 335*:454, (1988), all of which the entirety is herein incorporated by reference).

Application of these systems to different plant strains depends upon the ability to regenerate that particular plant strain from protoplasts. Illustrative methods for the regeneration of cereals from protoplasts are described (Fujimura *et al., Plant Tissue Culture Letters, 2*:74,(1985); Toriyama *et al., Theor Appl. Genet. 205*:34. (1986); Yamada *et al., Plant Cell Rep., 4*:85, (1986); Abdullah *et al., Biotechnology, 4*:1087, (1986), all of which the entirety is herein incorporated by reference).

To transform plant strains that cannot be successfully regenerated from protoplasts, other ways to introduce DNA into intact cells or tissues can be utilized. For example, regeneration of cereals from immature embryos or explants can be effected as described (Vasil, *Biotechnology, 6*:397,(1988), the entirety of which is herein incorporated by reference). In addition, "particle gun" or high-velocity microprojectile technology can be utilized (Vasil *et al., Bio/Technology 10*:667, (1992), the entirety of which is herein incorporated by reference).

Using the latter technology, DNA is carried through the cell wall and into the cytoplasm on the surface of small metal particles as described (Klein *et al., Nature, 328*:70, (1987); Klein *et al., Proc. Natl. Acad. Sci. USA*, 85:8502-8505, (1988); McCabe *et al., Biotechnology, 6*:923, (1988), all of which the entirety is herein incorporated by reference). The metal particles penetrate through several layers of cells and thus allow the transformation of cells within tissue explants.

Other methods of cell transformation can also be used and include but are not limited to introduction of DNA into plants by direct DNA transfer into pollen (Hess *et al., Intern Rev. Cytol., 107*:367, (1987); Luo *et al., Plant Mol Biol. Reporter, 6*:165, (1988), all of which the entirety is herein incorporated by reference), by direct injection of DNA into reproductive organs of a plant (Pena et al., Nature, 325:274, (1987), the entirety of which is herein incorporated by reference), or by direct injection of DNA into the cells of immature embryos followed by the rehydration of dessicated embryos (Neuhaus *et al., Theor. Appl. Genet., 75*:30, (1987), the entirety of which is herein incorporated by reference).

The regeneration, development, and cultivation of plants from single plant protoplast transformants or from various transformed explants is well known in the art (Weissbach and Weissbach, *In: Methods for Plant Molecular Biology*, (Eds.), Academic Press, Inc. San Diego, CA, (1988), the entirety of which is herein incorporated by reference). This regeneration and growth process typically includes the steps of selection of transformed cells, culturing those individualized cells through the usual stages of embryonic development through the rooted plantlet stage. Transgenic embryos and seeds are similarly regenerated. The resulting transgenic rooted shoots are thereafter planted in an appropriate plant growth medium such as soil.

The development or regeneration of plants containing the foreign, exogenous gene that encodes a protein of interest is well known in the art. Preferably, the regenerated plants are self-pollinated to provide homozygous transgenic plants, as discussed before. Otherwise, pollen obtained from the regenerated plants is crossed to seed-grown plants of agronomically important lines. Conversely, pollen from plants of these important lines is used to pollinate regenerated plants. A transgenic plant of the present invention containing a desired polypeptide is cultivated using methods well known to one skilled in the art.

There are a variety of methods for the regeneration of plants from plant tissue. The particular method of regeneration will depend on the starting plant tissue and the particular plant species to be regenerated.

Methods for transforming dicots, primarily by use of *Agrobacterium tumefaciens*, and obtaining transgenic plants have been published for cotton (U. S. Patent No. 5,004,863, U.S. Patent No. 5,159,135, U.S. Patent No. 5,518,908, all of which the entirety is herein incorporated by reference); soybean (U. S. Patent No. 5,569,834, U. S. Patent No. 5,416,011, McCabe *et al., Biotechnology 6*:923, (1988), Christou *et al., Plant Physiol., 87*:671-674 (1988), all of which the entirety is herein incorporated by reference); *Brassica* ( U. S. Patent No. 5,463,174, the entirety of which is herein incorporated by reference); peanut (Cheng *et al., Plant Cell Rep. 15*: 653-657 (1996), McKently *et al., Plant Cell Rep. 14*:699-703 (1995), all of which the entirety is herein incorporated by reference); papaya (Yang *et al.*, (1996), the entirety of which is herein incorporated by reference); pea (Grant *et al., Plant Cell Rep. 15*:254-258, (1995), the entirety of which is herein incorporated by reference).

Transformation of monocotyledons using electroporation, particle bombardment, and *Agrobacterium* have also been reported. Transformation and plant regeneration have been achieved in asparagus (Bytebier *et al., Proc. Natl. Acad. Sci. USA 84*:5345, (1987), the entirety of which is herein incorporated by reference); barley (Wan and Lemaux, *Plant Physiol 104*:37, (1994), the entirety of which is herein incorporated by reference); maize (Rhodes *et al., Science 240*: 204, (1988), Gordon-Kamm *et al., Plant Cell, 2*:603, (1990), Fromm *et al., Bio/Technology 8*:833, (1990), Koziel *et al., Bio/Technology 11*:194, (1993), Armstrong *et al., Crop Science 35*:550-557, (1995), all of which the entirety is herein incorporated by reference); oat (Somers *et al., Bio/Technology, 10*:1589, (1992), the entirety

of which is herein incorporated by reference); orchardgrass (Horn *et al.,Plant Cell Rep.* 7:469, (1988), the entirety of which is herein incorporated by reference); rice (Toriyama *et al., Theor Appl. Genet. 205*:34, (1986); Park *et al., Plant Mol. Biol.,32*: 1135-1148, (1996); Abedinia *et al., Aust. J. Plant Physiol.24*:133-141, (1997); Zhang and Wu, *Theor. Appl. Genet. 76*:835, (1988); Zhang *et al. Plant Cell Rep. 7*:379, (1988); Battraw and Hall, *Plant Sci. 86*:191-202, (1992); Christou *et al., Bio/Technology 9*:957, (1991), all of which the entirety is herein incorporated by reference); sugarcane (Bower and Birch, Plant J. 2:409, (1992), the entirety of which is herein incorporated by reference); tall fescue (Wang et al., Bio/Technology 10:691, (1992), the entirety of which is herein incorporated by reference), and wheat (Vasil et al., Bio/Technology 10:667, (1992), the entirety of which is herein incorporated by reference; U. S. Patent No. 5,631,152, the entirety of which is herein incorporated by reference.

Assays for gene expression based on the transient expression of cloned nucleic acid constructs have been developed by introducing the nucleic acid molecules into plant cells by polyethylene glycol treatment, electroporation, or particle bombardment (Marcotte, *et al., Nature, 335*: 454-457 (1988), the entirety of which is herein incorporated by reference; Marcotte, *et al., Plant Cell, 1:* 523-532 (1989), the entirety of which is herein incorporated by reference; McCarty, *et al., Cell 66:* 895-905 (1991), the entirety of which is herein incorporated by reference; Hattori, *et al., Genes Dev. 6:* 609-618 (1992), the entirety of which is herein incorporated by reference; Goff, *et al., EMBO J. 9:* 2517-2522 (1990), the entirety of which is herein incorporated by reference). Transient expression systems may be used to functionally dissect gene constructs (*See generally*, Mailga *et al., Methods in Plant Molecular Biology,* Cold Spring Harbor Press (1995)).

Any of the nucleic acid molecules of the present invention may be introduced into a plant cell in a permanent or transient manner in combination with other genetic elements such as vectors, promoters enhancers etc. Further any of the nucleic acid molecules of the present invention may be introduced into a plant cell in a manner that allows for over expression of the protein or fragment thereof encoded by the nucleic acid molecule.

Cosuppression is the reduction in expression levels, usually at the level of RNA, of a particular endogenous gene or gene family by the expression of a homologous sense construct

that is capable of transcribing mRNA of the same strandedness as the transcript of the endogenous gene (Napoli *et al., Plant Cell 2*: 279-289 (1990), the entirety of which is herein incorporated by reference; van der Krol *et al., Plant Cell 2*: 291-299 (1990), the entirety of which is herein incorporated by reference). Cosuppression may result from stable transformation with a single copy nucleic acid molecule that is homologous to a nucleic acid sequence found with the cell (Prolls and Meyer, *Plant J. 2*:465-475 (1992), the entirety of which is herein incorporated by reference) or with multiple copies of a nucleic acid molecule that is homologous to a nucleic acid sequence found with the cell (Mittlesten *et al., Mol. Gen. Genet. 244*: 325-330 (1994), the entirety of which is herein incorporated by reference). Genes, even though different, linked to homologous promoters may result in the cosuppression of the linked genes (Vaucheret, *C.R. Acad. Sci. III 316*: 1471-1483 (1993), the entirety of which is herein incorporated by reference).

This technique has, for example been applied to generate white flowers from red petunia and tomatoes that do not ripen on the vine. Up to 50% of petunia transformants that contained a sense copy of the chalcone synthase (CHS) gene produced white flowers or floral sectors; this was as a result of the post-transcriptional loss of mRNA encoding CHS (Flavell, *Proc. Natl. Acad. Sci. (U.S.A.) 91*:3490-3496 (1994)), the entirety of which is herein incorporated by reference). Cosuppression may require the coordinate transcription of the transgene and the endogenous gene, and can be reset by a developmental control mechanism (Jorgensen, *Trends Biotechnol, 8*:340344 (1990), the entirety of which is herein incorporated by reference; Meins and Kunz, In: *Gene Inactivation and Homologous Recombination in Plants* (Paszkowski, J., ed.), pp. 335-348. Kluwer Academic, Netherlands (1994), the entirety of which is herein incorporated by reference).

It is understood that one or more of the nucleic acids of the present invention including those comprising SEQ ID NO:1 through SEQ ID NO:10952 or complement thereof or fragments of either or other nucleic acid molecules of the present invention may be introduced into a plant cell and transcribed using an appropriate promoter with such transcription resulting in the co-suppression of an endogenous protein.

Antisense approaches are a way of preventing or reducing gene function by targeting the genetic material (Mol *et al., FEBS Lett. 268*: 427-430 (1990), the entirety of which is

herein incorporated by reference). The objective of the antisense approach is to use a sequence complementary to the target gene to block its expression and create a mutant cell line or organism in which the level of a single chosen protein is selectively reduced or abolished. Antisense techniques have several advantages over other 'reverse genetic' approaches. The site of inactivation and its developmental effect can be manipulated by the choice of promoter for antisense genes or by the timing of external application or microinjection. Antisense can manipulate its specificity by selecting either unique regions of the target gene or regions where it shares homology to other related genes (Hiatt *et al., In Genetic Engineering,* Setlow (ed.), Vol. 11, New York: Plenum 49-63 (1989), the entirety of which is herein incorporated by reference).

The principle of regulation by antisense RNA is that RNA that is complementary to the target mRNA is introduced into cells, resulting in specific RNA:RNA duplexes being formed by base pairing between the antisense substrate and the target mRNA (Green *et al., Annu. Rev. Biochem. 55*: 569-597 (1986), the entirety of which is herein incorporated by reference). Under one embodiment, the process involves the introduction and expression of an antisense gene sequence. Such a sequence is one in which part or all of the normal gene sequences are placed under a promoter in inverted orientation so that the 'wrong' or complementary strand is transcribed into a noncoding antisense RNA that hybridizes with the target mRNA and interferes with its expression (Takayama and Inouye, *Crit. Rev. Biochem. Mol. Biol. 25*: 155-184 (1990), the entirety of which is herein incorporated by reference). An antisense vector is constructed by standard procedures and introduced into cells by transformation, transfection, electroporation, microinjection, or by infection, etc. The type of transformation and choice of vector will determine whether expression is transient or stable. The promoter used for the antisense gene may influence the level, timing, tissue, specificity, or inducibility of the antisense inhibition.

It is understood that protein synthesis activity in a plant cell may be reduced or depressed by growing a transformed plant cell containing a nucleic acid molecule whose non-transcribed strand encodes a protein or fragment thereof.

Antibodies have been expressed in plants (Hiatt *et al., Nature 342:*76-78 (1989), the entirety of which is herein incorporated by reference; Conrad and Fielder, *Plant Mol. Biol. 26:*

1023-1030 (1994), the entirety of which is herein incorporated by reference). Cytoplamic expression of a scFv (single-chain Fv antibodies) has been reported to delay infection by artichoke mottled crinkle virus. Transgenic plants that express antibodies directed against endogenous proteins may exhibit a physiological effect (Philips *et al., EMBO J. 16:* 4489-4496 (1997), the entirety of which is herein incorporated by reference; Marion-Poll, *Trends in Plant Science 2:* 447-448 (1997), the entirety of which is herein incorporated by reference). For example, expressed anti-abscisic antibodies reportedly result in a general perturbation of seed development (Philips *et al., EMBO J. 16:* 4489-4496 (1997)).

Antibodies that are catalytic may also be expressed in plants (abzymes). The principle behind abzymes is that since antibodies may be raised against many molecules, this recognition ability can be directed toward generating antibodies that bind transition states to force a chemical reaction forward (Persidas, *Nature Biotechnology 15*:1313-1315 (1997), the entirety of which is herein incorporated by reference; Baca *et al., Ann. Rev. Biophys. Biomol. Struct. 26*:461-493 (1997), the entirety of which is herein incorporated by reference). The catalytic abilities of abzymes may be enhanced by site directed mutagensis. Examples of abzymes are, for example, set forth in U.S. Patent No: 5,658,753; U.S. Patent No. 5,632,990; U.S. Patent No. 5,631,137; U.S. Patent 5,602,015; U.S. Patent No. 5,559,538; U.S. Patent No. 5,576,174; U.S. Patent No. 5,500,358; U.S. Patent 5,318,897; U.S. Patent No. 5,298,409; U.S. Patent No. 5,258,289 and U.S. Patent No. 5,194,585, all of which are herein incorporated in their entirety.

It is understood that any of the antibodies of the present invention may be expressed in plants and that such expression can result in a physiological effect. It is also understood that any of the expressed antibodies may be catalytic.

In addition to the above discussed procedures, practitioners are familiar with the standard resource materials which describe specific conditions and procedures for the construction, manipulation and isolation of macromolecules (e.g., DNA molecules, plasmids, etc.), generation of recombinant organisms and the screening and isolating of clones, (see for example, Sambrook *et al., Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Press (1989); Mailga *et al., Methods in Plant Molecular Biology,* Cold Spring Harbor Press (1995), the entirety of which is herein incorporated by reference; Birren *et al., Genome*

*Analysis: Analyzing DNA,* 1, Cold Spring Harbor, New York, the entirety of which is herein incorporated by reference).

The nucleotide sequence provided in SEQ ID NO:1, through SEQ ID NO:10952 or fragment thereof, or complement thereof, or a nucleotide sequence at least 90% identical, preferably 95%, identical even more preferably 99% or 100% identical to the sequence provided in SEQ ID NO:1 through SEQ ID NO:10952 or fragment thereof, or complement thereof, can be "provided" in a variety of mediums to facilitate use fragment thereof. Such a medium can also provide a subset thereof in a form that allows a skilled artisan to examine the sequences.

In one application of this embodiment, a nucleotide sequence of the present invention can be recorded on computer readable media. As used herein, "computer readable media" refers to any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as floppy discs, hard disc, storage medium, and magnetic tape: optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. A skilled artisan can readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising computer readable medium having recorded thereon a nucleotide sequence of the present invention.

As used herein, "recorded" refers to a process for storing information on computer readable medium. A skilled artisan can readily adopt any of the presently known methods for recording information on computer readable medium to generate media comprising the nucleotide sequence information of the present invention. A variety of data storage structures are available to a skilled artisan for creating a computer readable medium having recorded thereon a nucleotide sequence of the present invention. The choice of the data storage structure will generally be based on the means chosen to access the stored information. In addition, a variety of data processor programs and formats can be used to store the nucleotide sequence information of the present invention on computer readable medium. The sequence information can be represented in a word processing text file, formatted in commercially-available software such as WordPerfect and Microsoft Word, or represented in the form of an

ASCII file, stored in a database application, such as DB2, Sybase, Oracle, or the like. A skilled artisan can readily adapt any number of data processor structuring formats (e.g. text file or database) in order to obtain computer readable medium having recorded thereon the nucleotide sequence information of the present invention.

By providing one or more of nucleotide sequences of the present invention, a skilled artisan can routinely access the sequence information for a variety of purposes. Computer software is publicly available which allows a skilled artisan to access sequence information provided in a computer readable medium. The examples which follow demonstrate how software which implements the BLAST (Altschul *et al., J. Mol. Biol. 215:*403-410 (1990)) and BLAZE (Brutlag *et al., Comp. Chem. 17:*203-207 (1993), the entirety of which is herein incorporated by reference) search algorithms on a Sybase system can be used to identify open reading frames (ORFs) within the genome that contain homology to ORFs or proteins from other organisms. Such ORFs are protein-encoding fragments within the sequences of the present invention and are useful in producing commercially important proteins such as enzymes used in amino acid biosynthesis, metabolism, transcription, translation, RNA processing, nucleic acid and a protein degradation, protein modification, and DNA replication, restriction, modification, recombination, and repair.

The present invention further provides systems, particularly computer-based systems, which contain the sequence information described herein. Such systems are designed to identify commercially important fragments of the nucleic acid molecule of the present invention. As used herein, "a computer-based system" refers to the hardware means, software means, and data storage means used to analyze the nucleotide sequence information of the present invention. The minimum hardware means of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means, and data storage means. A skilled artisan can readily appreciate that any one of the currently available computer-based system are suitable for use in the present invention.

As indicated above, the computer-based systems of the present invention comprise a data storage means having stored therein a nucleotide sequence of the present invention and the necessary hardware means and software means for supporting and implementing a search means. As used herein, "data storage means" refers to memory that can store nucleotide

sequence information of the present invention, or a memory access means which can access manufactures having recorded thereon the nucleotide sequence information of the present invention. As used herein, "search means" refers to one or more programs which are implemented on the computer-based system to compare a target sequence or target structural motif with the sequence information stored within the data storage means. Search means are used to identify fragments or regions of the sequence of the present invention that match a particular target sequence or target motif. A variety of known algorithms are disclosed publicly and a variety of commercially available software for conducting search means are available and can be used in the computer-based systems of the present invention. Examples of such software include, but are not limited to, MacPattern (EMBL), BLASTIN and BLASTIX (NCBIA). One of the available algorithms or implementing software packages for conducting homology searches can be adapted for use in the present computer-based systems.

The most preferred sequence length of a target sequence is from about 10 to 100 amino acids or from about 30 to 300 nucleotide residues. However, it is well recognized that during searches for commercially important fragments of the nucleic acid molecules of the present invention, such as sequence fragments involved in gene expression and protein processing, may be of shorter length.

As used herein, "a target structural motif," or "target motif," refers to any rationally selected sequence or combination of sequences in which the sequences or sequence(s) are chosen based on a three-dimensional configuration which is formed upon the folding of the target motif. There are a variety of target motifs known in the art. Protein target motifs include, but are not limited to, enzymatic active sites and signal sequences. Nucleic acid target motifs include, but are not limited to, promoter sequences, cis elements, hairpin structures and inducible expression elements (protein binding sequences).

Thus, the present invention further provides an input means for receiving a target sequence, a data storage means for storing the target sequences of the present invention sequence identified using a search means as described above, and an output means for outputting the identified homologous sequences. A variety of structural formats for the input and output means can be used to input and output information in the computer-based systems of the present invention. A preferred format for an output means ranks fragments of the

sequence of the present invention by varying degrees of homology to the target sequence or target motif. Such presentation provides a skilled artisan with a ranking of sequences which contain various amounts of the target sequence or target motif and identifies the degree of homology contained in the identified fragment.

A variety of comparing means can be used to compare a target sequence or target motif with the data storage means to identify sequence fragments sequence of the present invention. For example, implementing software which implement the BLAST and BLAZE algorithms (Altschul *et al., J. Mol. Biol. 215*:403-410 (1990)) can be used to identify open frames within the nucleic acid molecules of the present invention. A skilled artisan can readily recognize that any one of the publicly available homology search programs can be used as the search means for the computer-based systems of the present invention. Having now generally described the invention, the same will be more readily understood through reference to the following examples which are provided by way of illustration, and are not intended to be limiting of the present invention, unless specified.

**Example 1**

The cDNA library of the present invention designated LIB3222, is prepared from *Triticum aestivum* flowers. The wheat genotype WI89-085, hard red winter wheat from HybriTech US (Wichita, KS), is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Wheat heads are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11). Flowers are collected from the harvested heads and frozen in liquid nitrogen. The collected tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

The cDNA library of the present invention designated LIB3223, is prepared from *Triticum aestivum* flowers. The wheat genotype RL5710 (HybriTech US, Wichita, KS), a genotype developed by Ag Canada, is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Wheat heads are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11). Flowers are collected from the harvested heads and frozen in liquid nitrogen. The collected tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

The cDNA library of the present invention designated LIB3224, is prepared from *Triticum aestivum* roots. The wheat genotype RL5710 (HybriTech US, Wichita, KS), a genotype developed by Ag Canada, is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Roots are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11), washed free of soil, and frozen in liquid nitrogen. The collected tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

The cDNA library of the present invention designated LIB3225, is prepared from *Triticum aestivum* flowers. The wheat genotype Euro9316 (Phobos), European winter wheat from HybriTech (France), is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped

with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Wheat heads are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11). Flowers are collected from the harvested heads and frozen in liquid nitrogen. The collected tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

The cDNA library of the present invention designated LIB3226, is prepared from *Triticum aestivum* roots. The wheat genotype Euro9316 (Phobos), European winter wheat from HybriTech (France), is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Roots are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11), washed free of soil, and frozen in liquid nitrogen. The collected tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

The cDNA library of the present invention designated LIB3241, is prepared from *Triticum aestivum* roots. The wheat genotype WI89-085, hard red winter wheat from HybriTech US (Wichita, KS), is used for the collection. All plants are grown in Metro-mix 350 with Osmocote in a growth chamber with a 16/8 hour day/night cycle. The daytime and nighttime temperatures are 20 °C and 16 °C respectively. Growth chambers are equipped with metal halide high intensity discharge lamps which deliver about 500 uE/$m^2$/second. Humidity is maintained at 70%. Plants are sub-irrigated once a day for about one hour in the morning. No fertilizer is added into irrigation water. Roots are harvested from plants at pre-anthesis (boot, Feekes stage 10), anthesis (flowering, Feekes stage 10.5), and post-anthesis (ripening, Feekes stage 11), washed free of soil, and frozen in liquid nitrogen. The collected

tissue is stored at -80°C until total RNA preparation. The RNA is purified from the stored tissue and the cDNA library is constructed as described in Example 2.

**Example 2**

The total RNA is purified using Trizol reagent from Life Technologies (Gibco BRL, Life Technologies, Gaithersburg, Maryland U.S.A.), essentially as recommended by the manufacturer. Poly A+ RNA (mRNA) is purified using magnetic oligo dT beads essentially as recommended by the manufacturer (Dynabeads, Dynal Corporation, Lake Success, New York U.S.A.).

Construction of plant cDNA libraries is well-known in the art and a number of cloning strategies exist. A number of cDNA library construction kits are commercially available. cDNA libraries are prepared using the Superscript™ Plasmid System for cDNA synthesis and Plasmid Cloning (Gibco BRL, Life Technologies, Gaithersburg, Maryland U.S.A.), as described in the Superscript II cDNA library synthesis protocol. The cDNA libraries are quality controlled for a good insert:vector ratio.

**Example 3**

The cDNA libraries are plated on LB agar containing the appropriate antibiotics for selection and incubated at 37° for a sufficient time to allow the growth of individual colonies. Single colonies are individually placed in each well of a 96-well microtiter plates containing LB liquid including the selective antibiotics. The plates are incubated overnight at approximately 37°C with gentle shaking to promote growth of the cultures. The plasmid DNA is isolated from each clone using Qiaprep plasmid isolation kits, using the conditions recommended by the manufacturer (Qiagen Inc., Santa Clara, California U.S.A.).

The template plasmid DNA clones are used for subsequent sequencing. For sequencing the cDNA libraries LIB3222, LIB3223, LIB3224, LIB3225, LIB3226 and LIB3241, a commercially available sequencing kit, such as the ABI PRISM dRhodamine Terminator Cycle Sequencing Ready Reaction Kit with AmpliTaq® DNA Polymerase, FS, is used under the conditions recommended by the manufacturer (PE Applied Biosystems, Foster City, CA). The ESTs of the present invention are generated by sequencing initiated from the 5' end of each cDNA clone.

A number of sequencing techniques are known in the art, including fluorescence-based sequencing methodologies. These methods have the detection, automation and instrumentation capability necessary for the analysis of large volumes of sequence data. Currently, the 377 DNA Sequencer (Perkin-Elmer Corp., Applied Biosystems Div., Foster City, CA) allows the most rapid electrophoresis and data collection. With these types of automated systems, fluorescent dye-labeled sequence reaction products are detected and data entered directly into the computer, producing a chromatogram that is subsequently viewed, stored, and analyzed using the corresponding software programs. These methods are known to those of skill in the art and have been described and reviewed (Birren *et al., Genome Analysis: Analyzing DNA*,1, Cold Spring Harbor, New York, the entirety of which is herein incorporated by reference).

We claim:

1. A substantially purified nucleic acid molecule that encodes a wheat protein or fragment thereof comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952.

2. A substantially purified wheat protein or fragment thereof, wherein said wheat protein is encoded by a nucleic acid molecule that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952.

3. A transformed plant having a nucleic acid molecule which comprises:

(a) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule;

(b) a structural nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 10952 or complements thereof;

(c) a 3' non-translated sequence that functions in said plant cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

4. The transformed plant according to claim 3, wherein said structural nucleic acid molecule is a complement of any of the nucleic acid sequences of SEQ ID NO: 1 through SEQ ID NO: 10952.

5. The transformed plant according to claim 4, wherein said plant is wheat, cotton, soybean or maize.

6. The transformed plant according to claim 4, wherein said plant is maize.

7. The transformed plant according to claim 4, wherein said plant is soybean.

8. The transformed plant according to claim 4, wherein said plant is wheat.

9. The transformed plant according to claim 4, wherein said plant is cotton.

**Abstract**

Expressed Sequence Tags (ESTs) isolated from wheat are disclosed. The ESTs provide a unique molecular tool for the targeting and isolation of novel genes for plant protection and improvement. The disclosed ESTs have utility in the development of new strategies for understanding critical plant developmental and metabolic pathways. The disclosed ESTs have particular utility in isolating genes and promoters, identifying and mapping the genes involved in developmental and metabolic pathways, and determining gene function. Sequence homology analyses using the ESTs provided in the present invention, will result in more efficient gene screening for desirable agronomic traits. An expanding database of these select pieces of the plant genomics puzzle will quickly expand the knowledge necessary for subsequent functional validation, a key limitation in current plant biotechnology efforts.

## Combined Declaration and Power of Attorney for Patent Application

Docket Number: 38-21(15878)B

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled Nucleic Acid Molecules and Other Molecules Associated With Plants,
the specification of which is filed herewith unless the following box is checked:

❑ was filed on _;
as United States Application Number ; and
was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application(s) | | | Priority Claimed |
|---|---|---|---|
| | | | ❑ Yes ❑ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |
| | | | ❑ Yes ❑ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Lawrence M. Lavin, Jr. Reg. No. 30,768
Dennis R. Hoerner, Jr. Reg. No. 30,914
Richard H. Shear Reg. No. 26,583

Robert A. Auchter, Reg. No. 38,069
Jeffrey I. Auerbach, Reg. No. 32,680
Melvin L. Barnes, Jr. Reg. No. 38,375
William D. Belanger, Reg. No. 40,509
Michael J. Bell, Reg. No. 39,604
John A. Bendrick, Reg. No. 341,612
Celine T. Callahan, Reg. No. 34,301
Cono A. Carrano, Reg. No. 39,623
June E. Cohan, Reg. No. 43,741
Joseph V. Colaianni, Reg. No. 39,948
Chris Comuntzis, Reg. No. 31,097
Mary S. Consalvi, Reg. No. 32,212
Jenny Wei-Chun Chen, Reg. No. 44,604
Ben M. Davidson, Reg. No. 38,424
Ross E. Davidson, Reg. No. 41,698
James F. Davis, Reg. No. 21,072
Thomas M. Dunham, Reg. No. 39,965
Thomas C. Fiala, Reg. No. 43,610
Joel M. Freed, Reg. No. 25,101
Vernon Randall Gard, Reg. No. 33,886
Alan M. Grimaldi, Reg. No. 26,599
Sharmini Nathan Green, Reg. No. 41,410
Alexander J. Hadjis, Reg. No. 36,540
Albert P. Halluin, Reg. No. 25,227
Leslie L. Jacobs, Jr., Reg. No. 40,659
Derek J. Jardieu, Reg. No. 44,483

Christopher L. Kelley, Reg. No. 42,714
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Richard H. Kjeldgaard, Reg. No. 30,186
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David J. Kulik, Reg. No. 36,576
Viola T. Kung, Reg. No. 41,131
Robert C. Laurenson, Reg. No. 34,206

Joseph P. Lavelle, Reg. No. 31,036
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Andrea G. Reister, Reg. No. 36,253
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Timothy L. Scott, Reg. No. 37,931
Anthony W. Shaw, Reg. No. 30,104
J. David Smith, Reg. No. 39,839
Michael J. Songer, Reg. No. 39,841
Jennifer A. Tipsord, Reg. No. 40.205
William K. West, Reg. No. 22,057
Adam K. Whiting, Reg. No. 44,400
Robert J. Worrall, Reg. No. 37,969

Send Correspondence to:

**Larry M. Lavin, Jr.**
**Monsanto Company**
700 Chesterfield Parkway North, BB4F
St. Louis, Missouri
Facsimile: (314) 737-6047

Direct Telephone Calls to: 314-737-6670

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| | |
|---|---|
| Full name of sole or first inventor | Scott E. Andersen |
| Inventor's signature | Date 6/6/00 |
| Residence | St. Louis, Missouri USA |
| Citizenship | USA |
| Post Office Address | ~~1984 Oberlin Court, St. Louis, Missouri 63146~~ 1036 Fashion Sq. SEA St. Louis MO 63146 |

| | |
|---|---|
| Full name of second inventor | Joseph R. Byrum |
| Inventor's signature | Date |
| Residence | Des Moines, Iowa USA |
| Citizenship | USA |
| Post Office Address | 4533 Woodland Avenue, Unit 1, Des Moines, Iowa 50266 |

| | |
|---|---|
| Full name of third inventor | Robert C. De La Pena |
| Inventor's signature | Date |
| Residence | Ballwin, Missouri USA |
| Citizenship | USA |
| Post Office Address | 825 Forest Village Drive, Ballwin, Missouri 63021 |

# Combined Declaration and Power of Attorney for Patent Application

Docket Number: 38-21(15878)B

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled Nucleic Acid Molecules and Other Molecules Associated With Plants,
the specification of which is filed herewith unless the following box is checked:

☐ was filed on _;
as United States Application Number ; and
was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application(s) | | | Priority Claimed |
|---|---|---|---|
| | | | ☐ Yes ☐ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |
| | | | ☐ Yes ☐ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Lawrence M. Lavin, Jr. Reg. No. 30,768
Dennis R. Hoerner, Jr. Reg. No. 30,914
Richard H. Shear Reg. No. 26,583

Robert A. Auchter, Reg. No. 38,069
Jeffrey I. Auerbach, Reg. No. 32,680
Melvin L. Barnes, Jr. Reg. No. 38,375
William D. Belanger, Reg. No. 40,509
Michael J. Bell, Reg. No. 39,604
John A. Bendrick, Reg. No. 341,612
Celine T. Callahan, Reg. No. 34,301
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June E. Cohan, Reg. No. 43,741
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| | |
|---|---|
| Full name of sole or first inventor | Scott E. Andersen |
| Inventor's signature | Date |
| Residence | St. Louis, Missouri USA |
| Citizenship | USA |
| Post Office Address | 1984 Oberlin Court, St. Louis, Missouri 63146 |

| | |
|---|---|
| Full name of second inventor | Joseph R. Byrum |
| Inventor's signature | Joseph Byrum Date 4/5/00 |
| Residence | Des Moines, Iowa USA |
| Citizenship | USA |
| Post Office Address | 4533 Woodland Avenue, Unit 1, Des Moines, Iowa 50266 |

| | |
|---|---|
| Full name of third inventor | Robert C. De La Pena |
| Inventor's signature | Date |
| Residence | Ballwin, Missouri USA |
| Citizenship | USA |
| Post Office Address | 825 Forest Village Drive, Ballwin, Missouri 63021 |

# Combined Declaration and Power of Attorney for Patent Application

Docket Number: 38-21(15878)B

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| Prior Foreign Application(s) | | | Priority Claimed |
|---|---|---|---|
| | | | ☐ Yes ☐ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |
| | | | ☐ Yes ☐ No |
| (Application No.) | (Country) | (Day/Month/Year Filed) | |

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| Inventor's signature | Date |
| Residence | St. Louis, Missouri USA |
| Citizenship | USA |
| Post Office Address | 1984 Oberlin Court, St. Louis, Missouri 63146 |

| | |
|---|---|
| Full name of second inventor | Joseph R. Byrum |
| Inventor's signature | Date |
| Residence | Des Moines, Iowa USA |
| Citizenship | USA |
| Post Office Address | 4533 Woodland Avenue, Unit 1, Des Moines, Iowa 50266 |

| | |
|---|---|
| Full name of third inventor | Robert C. De La Pena |
| Inventor's signature | Date 9 June 2000 |
| Residence | Ballwin, Missouri USA |
| Citizenship | ~~USA~~ Philippines |
| Post Office Address | 825 Forest Village Drive, Ballwin, Missouri 63021 |

<110> Andersen, Scott E.
Byrum, Joseph R.
De La Pena, Robert C.

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ggatggcgcg cgggtacagc ttcatgaggc ttgtgcctga gatgagcgta cccgataagt 360

acagtgtcta caggcttgac ctcttcatcc aagtcagctc ggaccgt 407

<210> 14
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002b06b1

<400> 14

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agtgaggggt tcgatgatgt actgactgac gaggagaaga ggcagctgga atctgcgctt 120

aagatggatt cttcagatgc tgttggtgac agccagtccg acacctttgt aggtcctaag 180

catagttgct ttgagccaag ggagagggaa ataccaattg aggatttgag catctctgga 240

aatggggaga gtaagcatga taagaaaggc tgctttagta attggggaaa gaggggtcaa 300

actggcatta gtaaactaga gatgacacag aagatggcac ctccaagaag ttcgctctgt 360

gtaga 365

<210> 15
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002b08b1

<400> 15

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atgctgctag ggctgctaaa acggcaaggc ttaggcaagc caaagaagag gctgagagag 180

aaatagctga gtaccgtgca caaatggagg ctgatttcca gaggaagctc actgagacca 240

gcggtgactc tggcgcaaac gtcaaacgcc ttgagcaaga gacaaacgta aagattgagc 300

agctcaagca gcaggcagca aacatctctc cagaggtgat tcagatgctt ctgaggcacg 360

tcacaactgt gaagaactaa aggttgatga gtcagccctg catatgatgg caactttgta 420

ctatctgttc atttctttgg 440

<210> 16
<211> 125
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189002b09b1

<400> 16

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acacggacat gagttcaata ccattgccat tgataatgat tcatacttgg gcatggacca 120

ccctt 125

<210> 17
<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189002b11b1

<400> 17

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tgcgccacgc cgcccgccgc ctcgcgttcc gcgccgccgc tgccggcagc ggctccatga 120

gccgcagggc cctcgcgacg gcgcaggcgc ccgcggaggc gggcgaggac cccgccttcc 180

tggaggcgtg gaagaaggtg accacaatca tcgagccccc ccagacgccc atgtcgtcca 240

tgaagccccg cccgcccacg ccggcctcca ttccctccaa gctcaccgtc aacttcgtcc 300

tcccctacaa gtccgagatc accaacaagg aggttgacat ggtaatggta ccggctacaa 360

ctggcctgat gggtattttg ccaggccatg tttccacaat tgcagagctc 410

<210> 18
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002b12b1

<400> 18

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gctatgaggt gttgccatgc aagttgacaa aactcgggga tctaaatttg gttaagagct 120

cagcgggctg aatatgcact gtgactagta gtatg 155

<210> 19
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c01b1

<400> 19

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gcctgcttgc gccttcatcc cggtccggcc gctccgggct gccgttctgc gcctacgcca 180

ccacctccgg ccgcgtcacc atgtccgccg agtggttccc cggccagccc cgccccgccc 240

acctcgacgg ctcctcgcca ggggacttcg ggttcgaccc cctgggcctc gccaccgtgc 300

cggagaactt cgagcggttc aaggagtccg agatctacca ctgccgctgg gccatgctct 360

gcgtgcctgg ggtactggtg ccggaggcgc tggggctggg caactgggtg aaagcgcatg 420

agtgggcggc gctccccgac gggcaggcga cgtacc 456

<210> 20
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c06b1

<400> 20

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gcggctgcaa catgtacccg gaggtcgagg ccgccggcgc caccctcctc gtctccgcca 120

ctgccaccca caaggcgagc tccggcggga tggagatggc ggcggagaac ggcggctgcg 180

gctgcaccca gtgcaagtgc ggcaccagct gcggctgctc ctgctgcagc tgctagatca 240

ttgatcatgc atgcgccgcg tgcatcatat ctatgatcta tctaccatct actaccatgt 300

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ggtgccatgc catgcatgta aacccct 387

<210> 21
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c08b1

<400> 21

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ggcaacggct gcggcggctg caacatgtac ccggaggccg aggccgccgg tgccaccctc 120

cttgtctccg ccaccgccac ccacaaggcg agctccggcg ggatggagat ggcggccgag 180

aacggcggct gcggctgcaa ccagtgcaag tgcggcacca gctgcggctg ctcctgctgc 240

agctgctaga tcatcgatca tcgaccatgc atgcaccgtg ccgtgcgtgc atcatcgatc 300

atatcgatct actactacca taccatgtaa ccgctacctg atcgagggcc tttctgtacg 360

cacctgacct 370

<210> 22
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c09b1

<400> 22

cggattcgtg ggtggacgcg tgggctgaaa taatagagtg attgtgtgag gaaaaagccc 60

gggtacgttt gggtaagtga ccgcagaaca agatataaag atgaatgtat tcttactttg 120

ggcctttggc tcgctaacac at 142

<210> 23
<211> 114
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c10b1

<400> 23

gcagttagaa actcaccaaa tctttatccc ctgccctcag cagtgccgac ctgagcgccg 60

gagatctgcg gcgagcgaga tgaaagtgga ggagcagacg gtggtgggag gagg 114

<210> 24
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002c11b1

<400> 24

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ccagtactgg atgccgggat ggcccgatgt gaattcgcca taagcaatag aacctttttt 120

cttttaccat tttctgacga ggaattgtac taccatgtga tgcataattt gatcgtcctg 180

tgatcaaaag acatcatata taagtttaat aatattttca tgaacagttt acccttttat 240

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaaa aggggcggcc 330

<210> 25
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d01b1

<400> 25

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tggcggtggt tcccaggaag gaggctcgca gggcggaggc gaccaggccc cagaggccga 120

gtacgaggag gtgaagaagt gaagctgccc cagcagccca acccagttat tagctagtct 180

tgaggaacac tagggatctt gttggctgta ataaaatttt gctccactga ggcatgtgaa 240

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cgtgttcttc gctttgagtt acgttgatgt tgtggttc 338

<210> 26
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d02b1

<400> 26

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gttcaatcgg tcttccctgg gttttggtag ttttttagag agatatcatg tatgaataat 180

agaaaaagtt gtcgacgcca ctcttgactg gttgtttatg tatgtaactg tgtcggtgct 240

agggttatgg agtgtgtgtt gatatgggct agtgtgtccc tgtgtgggta agcatatgcg 300

tttgtaccgt gtttctaaaa aaactatatt tgcttaagat tgag 344

<210> 27
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d04b1

<400> 27

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gcgctgcacc agacgaccag cttcctcggc accgccccgc gccgtgatga cctcgtccgc 120

agcgtcggcg acttc 135

<210> 28
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d06b1

<400> 28

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cgggagaaga cgttgatggc tcgtgcatgt gctgcacaaa ccaatgcaac ctttctgaaa 120

cttgctggtc cgcagctagt ccagatgttc atcggtgacg gggcaaagct tgtccgagat 180

gcctttgagc tggcaaagga gaaggccccc tgcatcattt ttattgatga gattgatgca 240

attggtacaa agcgttttga cagtgaagtg agtggtgaca gagaagtgca acgaactatg 300

ttggagttgc tgaatcagct agatggattt agcagtgatg agaggataaa ggtgatagc 359

<210> 29
<211> 192
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d07b1

<400> 29

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aaatgaattc tcaaacgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaggggggg gg 192

<210> 30
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d09b1

<400> 30

aagctggctg agcacggcct cctcttgggt ttcctgatgc tgctgcaggg gggcgtgaag 60

catgcggcgg ctaagccacg ggagtggtac gtcggcgacc agaagggctg gaccttcggc 120

gtcgagggct ggcctaactt gcctaccttc aagcccttca gggaaggcga cgtgctggtt 180

ttcaagtacg accgtgcggc gcagaacgtg atgcaggtgg acgacttcgg gttcggcacc 240

tgcaccaggc accccgccaa cgccacggtg tacgactccg gcaacgaccg catcaggctc 300

tctcgcggac tcatcaactt catcagcggt gtctcggata actgctacaa gggcggcgtc 360

aagatctcac tcaccgt 377

<210> 31
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002d11b1

<400> 31

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tgctcttcct ccgcatcaag atacccacac c 151

<210> 32
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e01b1

<400> 32

cccattcgtc cgcccgtgac aatgcctgaa aaagagattg acgatgataa cagtactctg 60

cccaaggagg tggactggag gaagaaaggg gcggtggtgc cggtgaagaa ccaaggcggc 120

tgcggctcgt gctgggcgtt cgcggcggtg gcggccatgg aggggctgaa ccacatcaag 180

aatgggaagc tggtgtcgct gtcggagcag gagctggtgg actgcgacgc ggaggcggtg 240

gggtgcgccg gcgggttcat gagctgggcc tacgagttcg tcatggacaa ccacgggctc 300

accaccgagg ccagctaccc gtacctgggc gtcaac 336

<210> 33
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e02b1

<400> 33

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atcatcaacg gaataaataa aggatttgtc ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaggg ggggccgttt taa 203

<210> 34
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e04b1

<400> 34

gtcgttagct tgttattttt ttattctata tttgtgttac ctgatgcgaa ctatttctga 60

ttgtaaacct gatgtgaacc atgtttgatc gcaatgtgcc aggtttggct ctttttgatt 120

gtattcatga tttgaaccat gttttcatga tatttagtta tgctttgttt gaagcattgt 180

ataaatattg gttatttatt ta 202

<210> 35
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e06b1

<400> 35

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gcgtgagagg aaacaacatt cggtactaca tcctccctga tagcttaaac ctggaaacgt 180

tgctggttga ggataccccc agggtcaagt ctaagaagcc aactacaggg aagcctatgg 240

gtcggggtcg tggacgcggc cgtgggcgtg gtcgcggccg ggggcgctga gctttattgt 300

tccctgcttt ggaagctcgt gcagtgcaag tccctacagc gtaacctgct tcctctgcga 360

gctatgtcga agattgtctc tgttctgtta gaagatgtca atctaagtac gtgttgatgc 420

ggaatcatc 429

<210> 36
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e08b1

<400> 36

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aacggatacc cgtgcgtgcc ccagttggaa gccggcgacg acttcctctt ctcctccaag 180

ctagccaggg gcggcaacac gtccaccccg aacggctcgg ccgtgacgag gctggacgtg 240

acggagttcc ccggcgagaa cacgcagggt atctccatga accgcgtgga cttcgcgccc 300

gggggcacca acccgtcgca catccacccg cgcgccaccg agatcggcct cgtggtgaaa 360

ggcgagctcc tcgtgggcat catcggcagc aacgagtccg ggaacaggct ctac 414

<210> 37
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e09b1

<400> 37

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aaaggaggat gtcttgctgc ggcggcaact gcggatgcgg cgccggctgc aagtgcggca 120

acggctgcgg cgggtgcaag atgttccccg acgttgaggc caccgccggc gccgccgcca 180

tggtcatgcc caccgcctcc cacaagggga gctccggcgg gttcgagacg gccggcgggg 240

agaccggcgg ctgcgactgc accacctgca agtgcggcac ggcctgcggc tgctcctgct 300

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aggacaactg gacaagcaac caccaccacc accaccac 398

<210> 38
<211> 294
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e10b1

<400> 38

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ttttgggcag catatgttat tgaacgagct caatagactg ccaggtcttc cccatggcaa 120

gtgttctgga ctggctactg tgtttatgtg cttgctatgc tctggcacag aattgggcca 180

ttgcttgtct tacattccct ctgttgtaaa acttcaaact gaatatacct cttgtatggt 240

gtatgcagat atcttcggct agagataata tgttcagtat aaatactttc tctc 294

<210> 39
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002e12b1

<400> 39

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gatagcatgt ccctcttttc ttctagttta cttgtggccc ttgaggatga gtttcctgga 180

ttatgtaatg ctgctggatt attgtctgtt aggtttaaga ttttgcactg tggtttggct 240

gctaagattt gttcagtttg aacctgaaag agcttttgat cggatt 286

<210> 40
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f02b1

<400> 40

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aggcaagatg cattctttgg atgtactatc tgaaatttta caaagtaact acagaacaga 120

tgacgcaatg aagtacatct actaatc 147

<210> 41
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f03b1

<400> 41

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cgttgtgcgt cccttgatgg gtgtggtgct ggctgtagag tagcatagtg ttctctgaga 180

catgcttgta aaattaaact tttttggatc ctttttttttg ctcctgtaga gatgtatttt 240

cagttctgta tgtcatgctt gtaaaattaa tctttttttgg atccttttttt tgctcctgta 300

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ctgttaaatt attattggct taaaattt 388

<210> 42
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f04b1

<400> 42

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ggaagacggc agcgtttgag atacacgcaa agaagccagc atgatccatg atcggccgaa 120

gcaacactac ctgtgcagta tttagttatt acaaacagcc aagccatcct tgtaaaatag 180

ctagtggtgg ttaagaataa atatcttggc ctatttacta ttcgtgtatt atatctgtta 240

gaaacgttct agtgcagatg cagaacttcc cttctaaatg tctctattca atgccttgtt 300

cttggtagtc tttgtctttt ttttctgtgt gaggtggttc tgtgattaag ttgaaatgag 360

atataactgc attttc 376

<210> 43
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f05b1

<400> 43

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gggtcaggcg gcgaccattc aagtcccccc gggcacggcg gctggaagga tttggggccg 120

caccggctgc aacttcgatg ctagtggccg cgggtcatgc accacgggcg actgtggcgg 180

cgtgctagcc tgcgctgccg gcgggaggcc acccgcgacg ctcgccgagt acacgctggg 240

taagggcggc agccccgact tctatgacat ctccctcgtt gacggattca acgtgccgat 300

gagctttggg cctgccggcg gcggctttca cgcgataagc tgtgccgcgg acatcaacgc 360

aaattgcccg tcggagctga aggtggacgg aggatgcgtg agtgcctgcg tcaagttcgg 420

cgccccccag ta 432

<210> 44
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f06b1

<400> 44

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ctcgaaggag gagtaggctc tgttctgatg tgatcggcag ccctcctgga gtcgatcttg 120

gtttcggtgt atcgctagaa agaaacttta atacctagta gtcggctagg ctccatcgtc 180

gttgtggtat cagcagcgaa gatgcgaagc cgcaacagaa tgcttgctgt ataacttgtg 240

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aactcctgaa taattctgta cataatatgt attgcttcca ttagaaa 347

<210> 45
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f07b1

<400> 45

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ccaagatgaa gttcattgct gcctatctgc ttgcttacct ctctggcaac gccagccccc 120

ctgcagagga cctgacatcc attcttgagt ctgttggttg tgaaatcgac aatgagaaga 180

tggaactcat gctgtcccaa gtgaagggca aggacatcac cgagctcttg gctgctggta 240

gggagaagtt tgctgcggtt ccatctggtg gtggtggtgt ggctgtttca gctgctgccc 300

ctgctgctgg aggtgctgct gcccctgcag ctgagtcaaa gaaagaagag aaggtcgtgg 360

agaaggaaga gagtgatgat gacatgggct tcagtctgtt cgacta 406

<210> 46
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f08b1

<400> 46

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agtggactac agtcatgagg acggtcatgt ggacatcgtc gcttcttagt tcattagcag 180

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tggcttgttg atgattgatc aaagaaaaaa aaaagcctaa acttaacact 290

<210> 47
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f09b1

<400> 47

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ggatgtcttg ctgcggcggc aagtgcgggt gcggcgccgg ctgccagtgc ggcaacggct 120

gcggcgggtg caagatgttc cccgacgtgg aggccaccgc cggcgccgcc gccatggtca 180

tgcccaccgc ctcccacaag gggagctccg gcgggttcga gacggccggg gagaccggcg 240

gctgcgactg caccacctgc aagtgcggca ccgcgtgcgg ctgctcctgc tgcagctgca 300

actgagccgg cgcccatgat gccggcagag gcgagcacga ggatgaggag gaggacaagc 360

aagcaagcac catcgtcacc agttcacagc atgcgcccgc gcgcgcgct 409

<210> 48
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f10b1

<400> 48

ccctctcgtc cgcccacgcg tccggcgccc gcctgcccgc cccgatggcc cgcacgaagc 60

agacggcgag gaagtccacc ggcggcaagg cgccgcggaa gcagctggcg accaaggcgg 120

cgcgcaagtc cgccccggcc accggcggcg tgaagaagcc gcaccgcttc cgccccggca 180

ccgtcgcgct ccgcgagatc cgcaagtacc agaagagcac ggagctgctc atccgcaagc 240

tgcccttcca gcgcctggtg cgggagatcg cgcaggactt caagaccgac ctccgcttcc 300

agagctccgc cgtgtccgcg ctccaggagg ccgccgaggc ctacctcgtg gggctgttcg 360

aggacaccaa 370

<210> 49
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002f12b1

<400> 49

ggatgtcttg ctgcggagga aactgcggcg gcggcaccgc ctgcaagtgc ggcaacggct 60

gcggcggctg caacatgtac ccggaggccg aggccgccgg tgccaccctc cttgtctccg 120

ccaccgccac ccacaaggcg agctccggcg ggatggagat ggcggccgag aacggcggct 180

gcggctgcaa ccagtgcaag tgcggcacca gctgcggctg ctcctgctgc agctgctaga 240

tcatcgatca tcgaccatgc atgcaccgtg ccgtgcgtgc atcatcgatc atatcgatct 300

actactacca taccatgtaa ccgctacctg atcgagggcc tttctgtacg cacctgacct 360

gcatcagcag tcaggtgcca tgccatgc 388

<210> 50
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g02b1

<400> 50

aaatttaaaa aaaaaaaaaa aaaaaaaaaa aaagggcgga caatataaaa agaaa 55

<210> 51
<211> 436
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g03b1

<400> 51

ttgtccacca ccaccaccac cgcggcacgt acgtttgcga tcaaaagaaa gtcgagccat 60

atggcgaagg ccgcagcgat gctcgtgctg gtggcgctgg tggtggcggc gatggcaacg 120

ggcggagcgg cgcagtgcaa cgcggggagc ctggcggtgt gcacctcccc gatcatcagc 180

gggaccccgc cgtccaagac gtgctgcaac aacctaaaga gtcagcgggg gtgcttctgc 240

aagttcgcgc gcaaccccgc gtactccagc tacatcaaca gccgcaacgc cggcaagacc 300

ctcaccagct gcggcatcgc cgtaccgaag tgctaggagc cgggcctccg ccgccggcgc 360

cggcgtgcta ggcaccgccc cgccgcctat tgctactact actactacgt aacgtactac 420

ttacgagctc ctacca 436

<210> 52
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g04b1

<400> 52

ttgctgttct cagaaaagat tatgttaagc actttgtatg agaacattta tgaaactaat 60

aaagccttct cctcaaattg tgta 84

<210> 53
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g05b1

<400> 53

gccatcacca atcaaggcct ccatccaatc ccaagcaacc tcgaagatgt cttgctgcgg 60

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gtaccccgag gtcgaggccg ccggcgccac cctcctcgtc gccgccaccg ccacccacaa 180

ggcgagctcc ggcgggatgg agatggcggc ggagaatggc ggctgcggct gcacccagtg 240

caagtgcggc accagctgcg gctgctcctg ctgcagctgc tagatcattg atcatcgatc 300

atgcatgcac cgcgcgcatg catcatatct atgatcgatc catccatcca tctagtacca 360

tgtaacgcta cctgatcgag ggtctttgta tgtatgtaag cacctgccag catgagcaga 420

gcaggtgcac tcccatgcat gtaaac 446

<210> 54
<211> 158
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g07b1

<400> 54

tcgcttttgg ctgtcggttc taaaattaaa cttatgtgtg tcggttttgc ttggttagtg 60

accaccgagc agaagtgaac tcttgaggct gcttcgtttt ttgtgaacca aacgtatctt 120

gtttatcgat ttgacaagcc tggttctgag ttatttta 158

<210> 55
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g09b1

<400> 55

tttccgattc tccaaccgaa ccgaggatgt cttgctgcgg aggaaactgc ggcggcggca 60

ccgcctgcaa gtgcggcaac ggctgcggcg gctgcaacat gtacccggag gccgaggccg 120

ccggtgccac cctccttgtc tccgccaccg ccacccacaa ggcgagctcc ggcgggatgg 180

agatggcggc cgagaacggc ggctgcggct gcaaccagtg caagtgcggc accagctgcg 240

gctgctcctg ctgcagctgc tagatcatcg atcatcgacc atgcatgcac cgtgccgtgc 300

gtgcatcatc gatcatatcg atctactact accatacca 339

<210> 56
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002g11b1

<400> 56

tcggggtctt gcggcatcgt ttactgactt gcgcctcatt gaacgggatg gaaggagcag 60

ccctatcttg aaggactttc ctactgttat atccaacaat aaatgttatt ctatcactcc 120

tattgttaat tccgggtgct tctatggcgg gccaggaggt tgtgtgtaat actaagctgt 180

actttgaacg tggtggtgta ataatggttc ccttgagttt gtcttcccaa actcatactg 240

gcctaataag acactatgtg tttccg 266

<210> 57
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h01b1

<400> 57

ataaatgtgg atggtgtcgc cagacgacgc ctggttcatg ttagttggac atgagttacc 60

ttctgttttc cgcatcaacc tctagtatct gtaatggagt tgctaatcaa gtactctttt 120

ttggttgtgg tttgtgaaga atatataaat cgttcagtcc agtactcaac tccctttctg 180

tctggctttt cgcctcgtcc gtggcttgga tttctgcttt tgccttgttt 230

<210> 58
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h02b1

<400> 58

tcgcccactc gtccgcggcg agcgaaatgg gagcagccta aaccgtgaaa acggggttgg 60

gggagaagct cgaccgcatc gtccagcaga agctccatgg ttccgggctc gtgttttgag 120

caagagtcat ttgtcatgtg ttctgtgctc ctttgcactc tgctgcttct ggttggtgag 180

aggagagccc tatgttgatt gtgtttatta ttattattat tatcattatt gtttggattg 240

cttaccacat gtgtcaccgt ggtatgttga ttgtggttta attttgagaa taataataaa 300

acaacatctg gcctcatagg gtgggatacg c 331

<210> 59

<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h03b1

<400> 59

tcggtcttta gccatctttt tttttggaca aacaaagtgt ttagccaaaa aaaaaaaaaa 60

ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaagg gggggggggt ttaaagggaa aaaatttttg taccgggggt tgggaagaaa 240

aaatttttttt tttgggggca caaaaataaa ataaggggggg ggggttttaa aaaggggggg 300

gggggaaaa 309

<210> 60
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h04b1

<400> 60

tctccctctc gtccgcccac gcgtccgcac acgcaaggag cacgaggagg aggcaaggga 60

agccgccgcc gccgccgccc cgtccctcct cgccggccgg ccgccacagg tagtttcaag 120

atgtcaacct gcacgtttgc agcttcctgt gccctcttgg gcaatgctcg aacaaccgat 180

gccccccaga aagcggtcaa gagccgcctg agcttcctcg gccgaggcgc gccgcagctg 240

cggagcctga ggtcctcctt cccctccaag aagctggtga catctgcata caaggggacg 300

agcacgtaca aggtgaagct ggtgaccccg gaaggggacg agcacgagtt tgaggcgccg 360

gacgacgcct acatcctgga ctcggcggag ac 392

<210> 61
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h05b1

<400> 61

ttcggggcta gctcaaatct tcaattgaga agggtgtcgc gttcgcaaat gcaagttagt 60

taggtcattt tgcagattat agcaaaccca ggtctcgttg aggggtctgt tggtttggtc 120

cagtgctttt tctgcccatc atgtgggcat ggaagatttg agctttgcaa taaaatttcc 180

ggcggcgcaa tgccacacat aacataactt gtacgagagg aagctagttt tgtgtcgagc 240

tgtgaactga taatgaacaa ttgctgatgc gtgg 274

<210> 62
<211> 170
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h07b1

<400> 62

tcggatgttt gtttacttct gaagctactt cgcccttcc aaattactta cagcgtgctc 60

ggcagtatga gggaaaggga atggaaggtt acaagaggga gtatgtctag atattagact 120

tgagaattac tagaatttta gtctcaatct ccattttgat gtgtggtcgg 170

<210> 63
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h08b1

<400> 63

gggagttagc aactaatccg aggagtgtgc taccacgggg aagaagatcg ctggtggaac 60

ttgatttttt tctttcctgg gaagtagacc gtggatgatg gtatgtaatt gtggagcaat 120

gcatgcttgt tggatgtgta cttgtaccct ggtgttgtag ccgatgtaaa aaatgaatac 180

ccttttgaac att 193

<210> 64
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h09b1

<400> 64

gaaaaatcac cgacattctg ccattatacc atggaggcct ggaggaagac aaccatgtgt 60

tgtgtgattc ttttctgcct tatggctaca tgtagtgagg tttcatctac cgaaaacatg 120

tgctatcaca accattggaa taaatgccat actgatcaaa atggaatgtg tcgagatagt 180

tgtgtgaaag acggatggga tgatggacaa tgccggaaca agtttaaaag actaatgggt 240

gccaagtgcg aatgttaccc taagacttgt gatcattagg gaggcaacat gcgactttct 300

tctaccaagt tactactatt tataaattta catcggtttt aatgattgac gtcaaacatg 360

ttgtaacacc aatcatggtg aatactatat cacc 394

<210> 65
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189002h10b1

<400> 65

ggaaaacaat gtagccacgg tgtgatcacc aagggagcct cttggcaaag cttgtgtgtt 60

cttccttggt gcatgtgtgc gtgtgtgtgt gtggagtttc tccttgagtg aggcaagagg 120

tagaagaagg gcgttgcggc gaggaggcgg cgccaacatt tggtattcag agccacaagg 180

ttcgaggggc ggccgtggtg cgcggtggcg tccgcggcgg acggggcgtg cgcggccgac 240

atggaggcat cggctgcggc gcatggcgag cgcgtggtga cggcgacgcg tggcgggtcc 300

gcggcggtgc ggtgtgatgt cgtgcgcgcg aagagcacgg tggtcgcgga gacgaggagg 360

tcgcggagga cctgcgtggt ggcg 384

<210> 66
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189002h11b1

<400> 66

tgctgccccc ctccacaccc gtgccgccgc cgccgtcgcc gcccgcgtcc ccccatggcg 60

ctgccgaacc agaacaccgt cgattacccc agcttcaagc tcgtcatcgt cggcgatggc 120

gggactggca aaaccacttt tgtgaagagg catctcactg gagagtttga gaagaaatac 180

gagcccacca ttggtgttga agttcaccca ttggatttca ccactaactg cggaaagatc 240

cgtttctact gctgggacac tgctgggcaa gagaagtttg gtggccttag agatggatac 300

tatatccatg gtcagtgtgc gattatcatg tttgatgtca cttcaaggct gacctacaag 360

aatgttccta cgtggcacag ggacctgtgc agggtttgtg agaacatccc cattgtcctg 420

tgcggcaaca 430

<210> 67
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189002h12b1

<400> 67

cccacgcgtc cggctgcatg tggtttgtct tcagcttcgt actactgtct actagtgctt 60

gtaactttat tttcttggct cggtatgctc gctgcatgct agcgagtgat gggtgtatgt 120

gtgtgctctg tgtaagctcc atgcgtgtgt aaattctctc gtgtgtgtgg tgtggtcttc 180

tcaatgttta accacctatg gtaaagacaa taacagcctc agagcaagtt ttccttaa 238

<210> 68
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a01b1

<400> 68

cccacgcgtc cgtcaaacca tggcgtccat gaccggcctg tcgcagggcg tgcgtctccc 60

aggcccggcc ggcaggcgcg ccagcaggtt caccgtgagg gcgtcgtcgg cggaggccga 120

ggccgccggc cgccgcgcgg tccttggcct catggccagc ggagtcgtcg ggagcgcgtt 180

cgctcaggtg gtgcacgccg gcaccgtcgc ggccatcaag gttggccccc cgccgccgct 240

ctccggtgga ctccccggaa cggacaactc ggacgaggca agggacttcg acctgcccct 300

gaagaaccgg ttctacctgc agccgctgcc accggcggag gcggcggtgc gggccaagga 360

gt 362

<210> 69

<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a03b1

<400> 69

gtcgggcacc gtgctatgtg gacgagcact accttcccac cgtgctctcc atcgaggctc 60

cggagcgcat cgccaaccgg agcatcacct tggtcgactg gtcccgcggc ggcgcccacc 120

cggccacctt cggcgccgcc gacgtgactg aggacttcct ggggacgctg gtggggaaga 180

aggggaatgc tgagcggtgc atgtacaacg ggcagccggt cgaggtgtgc ttcctctttg 240

cgaggaagtt cgcccctgcc gctttgccgc agttgctcag cctttcctcc aagatccttg 300

ggtactagct atgcctttta ctaaatcgat tttggtcttt ttatgtatag ctcatactca 360

ctggagtgga atagaggaat acaattcttt ttttcatgtg tcacaaagaa caaaaggatg 420

aatgatcgag tgggtggttt ttcttgacca ttcatatttc tg 462

<210> 70
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a04b1

<400> 70

cccgctcgcg cccgcagaag gttcaagagg ggtctcaaga ggaagcccat ggcgctcgtc 60

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acacatctcc gcaacatgat cattgtccct gagatgattg gcagccttat cggtgtctac 180

aatggcaaga ccttcaacca ggttgagatt aagcctgaga tgattggcca ttaccttgca 240

gagttctcta tctcctacaa gccagtgaag cacggtaggc ccggtatcgg tgccacacac 300

tcttcccggt tcatccctct taaatgagtt gtgccgcttt ctactttgaa agaaatcagt 360

acggaccatc tgatggcatg tccatcgagc tgtctccctt gttttgaacc agttatatat 420

ctagtatttg gttctggtta gctatataat ttcgttatgc ac 462

<210> 71
<211> 115
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a05b1

<400> 71

aaatttaaaa attttataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaagaa aaataaaaaa aaaaaaaaaa aaaataaaaa atgggggggcg gcctt 115

<210> 72
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a06b1

<400> 72

gccctcggcc ggtgccgtcg ccgtcgccgt cgccgctgag ccaaccaccg aagcgcctcg 60

aactcctcgt cctcctcccc gtgcctgccg tcctccaccg gatcggcccg gatcggaggc 120

tcccgcgaag cgattcctcc cgtcaggcag tcgagatgtc ggagtacaag aacgtcgttg 180

gggggaagct caaactgaag gggaaaccgc tggatgtcaa ggagggcgga gtcaagaaga 240

agaataagaa gaagcaccgc cgcgaggagt cgtctcaagg cgagcacagc gagctccgcg 300

aaggtggaag ctctgaatta ccaggcgacc ctgacaatga attcagtgaa gctgacaagc 360

tgggagagga agggagtgcg caagccgatt atgaccacct cactccagcc gagaggcgtt 420

acattgaaca gaagcagaaa tcgatcagca tcgac 455

<210> 73
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a07b1

<400> 73

agaacctgaa tttaacagca aaactagctt tctgacgccg tcagttttgt tttattatta 60

tagaaagacg atgccggttt gtcgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaggggg ggc 193

<210> 74
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a08b1

<400> 74

aaaattaaaa attttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag 60

gg 62

<210> 75
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a09b1

<400> 75

ctcatcttct tctccttgaa atctttttgg gtccacagat ttggaggatg tcttgcaact 60

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cggagcaggg cagcgccgcc gccgaggtcg ccgccgtggt cgtcctcggc gtggcgcctg 180

agaacaaggc gggacagttc gaggtggccg ccgggcagtc cggcgagggc tgcagctgcg 240

gcgacaactg caagtgcaac ccctgcaact gttaagct 278

<210> 76
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a10b1

<400> 76

gcaaccgggt ttaaaccacc cattgttgaa agaccataaa atccagatga aaccaagttc 60

tatccctgtt tggatggata ccgaaacatt tccttcggat tctttttcac aagcggaacc 120

atctatcatc gagtgcccaa caggaacagt tccaatactg cgtagtaacg gaagtagcac 180

catagcaaca cacaatattg atgggctcaa aaacgatatg caatgggaga gggcaggact 240

cagatacatg ggtgatttat atggggcgtg tgcttcatta aatgtttggg agccaaaggt 300

taaaggtagc caggattcta gtgcaatttg gataagtatt gaaaatagaa gaggacaaca 360

gcctgatcgg gtgagcgccg gtcttcgggt agctccagca ttgagtggtg atgcttttgt 420

tagacttcat g 431

<210> 77
<211> 170
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a11b1

<400> 77

atcttgctcg cgatggtaat gaaattatcc gagcagcttg caaatggagt cctgaactag 60

ccgcagcttg tgaagtatgg aaggcgatca aattcgagtt cgagccggta gatactattg 120

ataagtctat aaatctaaag ataaagaaga gaaggtataa atgaaggtat 170

<210> 78
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003a12b1

<400> 78

caagaagaag ggcgtggaga cgtacaagat ctacatcttc aaggtgctga agcaggtgca 60

ccccgacatc ggcatctcct ccaaggccat gtccatcatg aactccttca tcaacgacat 120

cttcgagaag ctcgccgggg agtcggccaa gctcgcccgc tacaacaaga agcccaccat 180

cacctccagg gagatccaga cctccgtccg cctcgtcctc cccggggagc tcgccaagca 240

cgccgtctcc gagggcacca aggccgtcac caagttcaca tcctcctaga ctgacggcgt 300

gcagttggtt tctgcatctg catctgtact cttgactctg cttatctatc tatctgcaag 360

tagtggtggt ggtagtagta cctgtgctgg gtgattgcca acgctttgtt ggcccgttgg 420

ttgtaagagc tgaagttgct gctttggcaa actgaaatct atcta 465

<210> 79
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b01b1

<400> 79

ctctctctct ctccatcgac ctaacctaca cacccagaga aagagagaga agcagcagta 60

gctcatgtaa cctagctagc ctgcagatct ccacgggaac gcttcttatt gttggctgcc 120

gaccgttgaa cctacccggg gtctgaacgg ataaaggggc agcgaggcgg cctctccagg 180

ggataatcag aaggaagaat gtgctcgtcc ggccagatca caccggcaga agaagtctgc 240

tacgtgcact gcaacttctg ccacaccaga ctcgcggcga gcgtccctgg gaacaacctg 300

ctcaacatcg tgacagaccg gtgcgggcac tgcacaaacc tactttcggt gagcctgaga 360

gggcagatgc actcaccggt cc 382

<210> 80
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b02b1

<400> 80

cccacgcgtc cggtacgtcg acgtcaaggt gaacggcgcc gtgcacaagg gtatgccgca 60

caagttctac cacggccgca ccggacgcgt gtggaacgtc accaagcgcg ccatcggcgt 120

cgagatcaac aagcaggttg gaaaccgcat tatcaggaaa aggatccatg tccgtgttga 180

gcatgtgcag ccatccaggt gtgctgagga gttccgcctg aggaaagtga agaacgacca 240

gctcaaggcg gaagccaagg cgcgcggtga ggtcatcagc accaagaggc agccactcgg 300

ccctaaacct gggttcatgg tcgagggtac cacaattgag accgtcactc ccattcccta 360

cgatgtggtc aatgatctca agggtggtta ctagggtgtt tgggttatct gcctgcacaa 420

ccagttcaaa tctatggtgc tcttatgagt aggatttgct ctctgagcaa gagtctgggt 480

tgggtcttta ttcatgtcaa gaagatatt 509

<210> 81
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b03b1

<400> 81

cacagtagca ctagcttgag ctagccacct tctgccactc cgggcatttt cttgcatcca 60

cgaaggcaat ggccactgct gatgtccaga acccggcggt cgcgctgacg gaggaggcgc 120

ccgcggtgga gacacccctg gtcgccgagg aggtcgcgaa gacggaggag gcccccacgc 180

cggcggtggc cgaagtcgaa gcgcctgctg cccccgtcga ggttgaggag actaaggagg 240

aggcgccggc cgccgctgag acggaggaga ccaaggagcc cgagcccgca gctgcggccg 300

agccggaggc cgaggcgcca gccgtggtcg agacagagac caaggaggcc gtggctgagg 360

cagagccggc ggtggtcgag gaggtgaagg aggaggcggc gcctg 405

<210> 82
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b04b1

<400> 82

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gaagggcatc tccacgaacg tgacgttccc gacggtcaag gcgaagctgc ggctgctgtt 120

cgaggtggcg ccgctggggt tcttgataga gaaggccggg gggcacagca gcgacggcaa 180

gcagtcggtg ctggacaagg tgatctccgt cctggacgag cggacccagg tggcctacgg 240

ctccaagaac gagataatcc gcttcgagga gaccctctac gggtcctcca gactcgccgt 300

cagcgccacc gtaggcgcca ccgtctgata atcgatccat cttcttttt tacgcttttt 360

tcaacctgaa aaacaagatg tccgttatag agttcgcctg aagcat 406

<210> 83
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b05b1

<400> 83

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acgtgagcct gtctaccttc gcgcccacgg ccaggggcga cgtcctcgcc aggcctcagg 120

tggccgccgc ccgcgtcacc ttcccgacgg cgtaccgtgg cagcggtgcc ctctcctgca 180

gggcgggtgg gccggccacg ccgccgggca tctccgacaa gatgtcggac agcatcaagg 240

aggcccagga gacgtgctcg gaggacgccg ccagcgggga gtgcgcggcg gcgtgggacg 300

aggtggagga gctcagcgcc gccgccagcc acgcccggga caagctcaag gactccgacc 360

cgctcgagaa ctactgcaag gagaaccccg agaccgacga gtgccgcacc tacgacagct 420

gagcgtacgt gctaatttgt tctggacg 448

<210> 84
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b06b1

<400> 84

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tggggtttcc ttcctaatcc tgcaagatct cctcgtttgt caaagatttt tccatgggct 120

gggacatttc ctcttccatc agttgtgagg aaacttactg aaacagtgtg gcagaagata 180

agcgacccaa gaagtataca gaagatactc aggcaagtat atgctgatca ctcaacaaat 240

gttgacaagg tgttctcacg tattatagag acaacagaac acccagcagc tgctgcatca 300

tttgcctcca ttatgtttgc tccaatgggc cagatatcct ttcaggaggc actatctagg 360

tgccaaaagc aggacattcc catttccctt atgtatggga aagaagatcc ttgggttaca 420

ccttattggg gtatc 435

<210> 85
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b07b1

<400> 85

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aa 62

<210> 86

<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b09b1

<400> 86

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caggaggagg gatcgcgcgg ggccgcctcg cggaggagcg caaggcctgg cgcaagaacc 120

acccccatgg attcgtcgcg aagccggaga cggtggccga cgggtcggtg aatctcatga 180

tctggaactg caccatcccc ggaaagcagg ggactgattg ggaaagtgga tactacccac 240

ttactctcca tttcagtgag gactacccta gcaaacctcc caagtgcaag ttcccgcagg 300

gttttttcca cccaaatgtc tatccttcag ggacggtctg cctctcgatt cttaatgagg 360

atagtggttg gagacctgcc atcactgtta agcagattct agttggaata caggatttgc 420

ttgatcaacc taatccagct gat 443

<210> 87
<211> 106
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003b12b1

<400> 87

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gaccaagaac cataggtgga cgacaaggcg ccgaagccca aaacaa 106

<210> 88
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c01b1

<400> 88

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cagcatcgga tttacctggt ttctagtctt atcatggaat ttaggggctt tgtgcaaatc 180

tcggttttgc cctgcggttt gcttgtatgc ttgggttgtg ttcagctcca aaatgctggc 240

cggaagtaca ttttgtggat tccatttgg 269

<210> 89
<211> 181
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c02b1

<400> 89

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tccttgttac agatcgagca gattactgat cgaatcatca ataaaataat gtgttgagcg 180

g 181

<210> 90
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c03b1

<400> 90

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ctgtcggatt cgttccctta cagggagctg gagaacggcg tgctctggga agtcgatggc 180

cattgggtcg ttcaaggagc agttgatgtg gacattggag ccaatccctc tgctgagggt 240

ggtggtgatg atgagggtgt tgatgaccag gccgtgaagg tggttgacat tgttgacacc 300

ttccgtcttc aggagcaacc tgcttttgac aagaagcagt ttatctctca catgaagcgc 360

tacatcaaga acctctctgc caagcttgaa ggggatgacc tagatgcttt caagaagaat 420

gttgagtccg ccacaaagta tcttcttagc aagctcaagg accttcagtt ctttgttggc 480

gagagcatgc atgatga 497

<210> 91
<211> 131
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c04b1

<400> 91

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ggacagatct atcctgatgg tagcaagagt aacaatacag tctataatgc tacgtcaaca 120

ggtatagtaa g 131

<210> 92
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c05b1

<400> 92

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atattcgagt acacgtaaaa ctagaccctt cctgagcaca catatttgtc aatctggcgc 120

atccacaaga gacatacatc catatgaagg gatccataag ttgacatgat catttctagg 180

gcatgaccag taagaatgag tgcgaaggac ttaaggatca caactgaaca agcattgctt 240

taaaaaattg ggttcagctt tgctatcctg 270

<210> 93
<211> 242
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c07b1

<400> 93

cccattcgtc cgcccacgcg tccgcccacg cgtccggtcc ttctcctcct cctcattcct 60

accttagcgc tgcatgctgc atgcatgcaa cgatagacgt gggctgatca tctcctgtgg 120

aatagctcaa catctaaccg tatcatcaag aggagagaca agggagagga gatctcacat 180

gaattattgt tatttaatta gccaggcata aataaaaact accaaccgat ttgttgtttg 240

tt 242

<210> 94

<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c08b1

<400> 94

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ctggcttcaa gaaggatgag aagcagctgg acgctgagat tcaccgcaaa tacatctatg 120

gaggccatgt tgctgactac atgaagtcac tggctgatga ggaacctgag aagtaccaat 180

ctcacttcag tgagtacatc aagaagggga ttgaggctga taacatggaa gcactgtaca 240

agaaggttca tgctgccatt cgtgctgatc ctaccatggc aaagtcaacc aaggaacctc 300

caaagacgca caagaggtac aatcccaaga agctgaccta tgagcagagg aaggccagtc 360

tcgtggagcg gctcaacgcc ctcaactcat ctgctggtgc tgatgtcgat gaggacgacg 420

acgaatgagt g 431

<210> 95
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c09b1

<400> 95

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gaagcagaaa cccctgtaga gttggttctc gtgatgacgg tcgagcctgg ctttggtggc 120

cagaagttca tgccggagat gatggataag gtgcgtacgc tgaggaagaa gtacccgtcc 180

ctcgacattg aggtcgacgg tggcctgggt ccttccacca tcgacgccgc cgcgtcggcc 240

ggcgccaact gcatcgtcgc cgggagctcc gtgttcggcg cgcccgaccc cggagaggtc 300

atctcggcgc tgcgcaagag cgtggaggcg tcgcagatca agagctgatc atctgtagct 360

ctgcgcgctc ggacggacgc atgtttctgc tgtaaactag aaccactctg cacgaccgac 420

gctcggtcag cagt 434

<210> 96
<211> 299
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c10b1

<400> 96

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gtttctgaac ccgttggatt ctgtatgtag ttaggtgcaa gattgtcttc tgaatttgtg 180

atcttgtgct gcttgttggt ctgcagaaat gttcatggga ctacttaatg atattcttgc 240

tgcttgaaga aaaaaaaaaa aaaaaaaaaa aaaataaaaa aaaataaaaa aaaaaataa 299

<210> 97
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c11b1

<400> 97

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cgagtggtac ggcgcctccc tccgctcggt gtccaccggt cgcgccgccg ctgccaagat 180

gctttactcc tacgacaccg tcctgcacgg cttctcagcg cggctcacgg agcaggaggc 240

cagcgacatg gcgggcatgg acggcgtcct ggccgtgaac cccgagacgc ggtacgagct 300

gcacaccacg cggacgcctg agttcttggg gctcgccggg agcgagggcc tgttcccgca 360

gtctggcacg ggcggcgacg tcgtcgtcgg ggtgctcgac accggcgtct ggcctgagag 420

caagagctac aacgacgc 438

<210> 98
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003c12b1

<400> 98

cccacgcgtc cgccatagcc tacccagtgt tgcctagtta gttggatctt gtatgtagtg 60

tggtggcccc tttcatcaga tctcgatgag caaggccggc attgtgtatc tgtgatttct 120

gtggtaatgg ttaaagatgc aatcctttca atctt 155

<210> 99
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d01b1

<400> 99

cccgtgtgta gctatgggta taggcggccg cgttatgagt actttctacg accttagcaa 60

cgcacggtct tagcttgctg gctggcaagc tagtactgga ctgcctgccg tattttggaa 120

ggattaacga caacatatac gattgactct cgagcgtctt gtactataca ttgtgtaaat 180

gaacgaaaca atcttagtag tccgtttcac aagatcggct tatgtgtatc a 231

<210> 100
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d02b1

<400> 100

ctgttctctg gggttttggt ggtgttatcg atgaagctga tttttgcccg tttggcgccg 60

gggctgtatc catccatgtc ttttgaaaaa tgctacgtgg ctactcttaa tgtagtgtga 120

tactcgtata aaagcaatct gtttgtg 147

<210> 101
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d05b1

<400> 101

ggcatacttg gctgggccat tgatgaggat tttggttcta ttgagaaact tataaagaag 60

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gaggccaaaa agctttcagt tgaaactact cctaatcagg accctcttgt gaccaaaggg 180

tcaaacctgt atcctttgtt gggaattgat gtctgggagc atgcgtacta cctgcagtac 240

aagaacgtga ggccggacta cctgaccaac atctggaagg tggtgaactg gaaatatgcc 300

ggag 304

<210> 102
<211> 104
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d06b1

<400> 102

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ggtgtcgatt tacatatggc cccgtgattg cttcttcatc gatc 104

<210> 103
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d07b1

<400> 103

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ctttgcagcg ttttggatgc cggtcgtgga ccgaacgttt attgttttgt tttcagttgt 180

atcccgttta aacctgatgc ccgagggctt tattattaat ttaaagccgg acgtttctag 240

cgtctccgtt cc 252

<210> 104
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d09b1

<400> 104

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taatcatcgg tagacaaaga acaagggcga agttgccgcc atgctatatt attgttacgt 180

cttgcttcag cggagctgca ctctcatggt cgtcgtccct ccccccctacc ccaccctagg 240

ttacccaccg gcagctgcag caaggtctct ttgtcgaggc atcgggcgat ccatttgttt 300

gatttctctt cttcctgcct tgtgattatc tcgtgtgact gacaagtcgt ggcaatttag 360

gtaacttgct tagtagacgg tatttcccgt gtttgagacc ccgtaaaaaa aaagtatctc 420

gttgttatct cggttccata agtagagaca tgatgtaatc gcactcagtt tattttattt 480

<210> 105
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003d11b1

<400> 105

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gcggcgccgg gcggggcgcg cgcggcgtgc caggcgtcgc agctggcggt gtgcgcgtcg 180

gcgatcctct ccggggccaa gccgagcggc gagtgctgcg gcaacctgcg ggcgcagcag 240

gggtgcttct gccagtacgc caaggacccc acctacgggc agtacatccg cagcccccac 300

gcgcgcgaca ccctcacctc ctgcggcctc gccgtcccgc actgctaggc gccggcaggc 360

ccctggcgca tatggctagc tagctgccgc cgtgagagtg tcagactata gctagcccta 420

gctgagtgcg tacgtgttgc gtccatgaac gcatcttcct gctaaactac tatgtggttc 480

g 481

<210> 106
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e01b1

<400> 106

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ggattaacga caacatatac gattcactct cgagcgtctt gtactataca ttgtgtaaat 180

gaacgaaaca atcttagtag tccgtttcac aagatcggct tatgtgtatc a 231

<210> 107
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189003e02b1

<400> 107

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tctgtattac aatttggtgg aggaacttta ggacatcctt ggggaaatgc acctggtgca 120

gcagctaatc gagtggcttt agaagcctgt gtacaagctc gtaacgaagg gcgcgatctt 180

gctcgcgaag gtaatgaaat tatccgagca gcttgcaaat ggagtcctga actagccgca 240

gcttgtgaag tatggaaggc gatcaaattc gagttcgagc cggtagatac tattgataag 300

tagataaaac taaagataaa gaagagaagg 330

<210> 108
<211> 196
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189003e03b1

<400> 108

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ggttttgcga actgtcttat cttctgtact ggaatattga cataaatata gatcatggta 180

attttctttt cctgtt 196

<210> 109
<211> 131
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189003e04b1

<400> 109

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atacatatgt gatggaaatt tgtagaatgt gtgttctgag atatttccgt aatattcagc 120

taattcgtgg t 131

<210> 110
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e05b1

<400> 110

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cggcgccggc ggaggcagga atgcggatgt tctccaaggc ctgctcgctc gtcgtctcct 180

ccctcccgcg ctgctcctcc tccgcccccg cgattagggg ccagccgtcg ttgataccga 240

gggtgagcag gaaatggctc gggaagccgc tcatgtacgg gatcggcacg ctgctggtca 300

tgcccctgag gaccatccac ggggtgggcc ggatgttcgg cgccgcgcgc tacctctgca 360

acatgaccag cgtctcctcg tcgctgcaaa tcgagctcgt accctgtctt caagataact 420

atgcgtacat cttgcatgat gtggata 447

<210> 111
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e06b1

<400> 111

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cgaaataagt tgcttcaata acttatcaga atgtacccag gattgcaatg atttgtcaaa 120

ctagtttaga gg 132

<210> 112
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e07b1

<400> 112

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tgtgtgctta tgaggtgctg gtacttatcg aggacagcag gggggtagcg tactcgtggt 180

gttgcactat gttttgtttc tttgttatat ttttgagtgt ttgatctgtt tgagcctttg 240

tgacctgaga aaataaaaat aatatgagtt acctttgtta atttaaaaaa taaaaaaaat 300

aaataaa 307

<210> 113
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e08b1

<400> 113

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actacaagga gccgcccccg gcgcccctct tcgaggcgga ggagctcacc tcctggtcct 180

tctaccgggc cggcatcgcc gagttcctgg ccaccttcct cttcctctac atctcggtgc 240

tcaccgtgat gggcgtggtg ggcaacccgt ccgggtccaa gtgcggcacc gttggcatcc 300

agggcatcgc ctggagcttc ggcggcatga tcttcgtgct cgtctactgc accgccggca 360

tctccggcgg acacatcaac cccgcggtca ccttcgggct gttcctggcc aggaagctgt 420

cgctcaccag ggcggtattc tacatggtca tgcagtgcct gggcgccata tg 472

<210> 114
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e09b1

<400> 114

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tgggcggcct cgcctgggcc accgacgacc agtccctcca gaacgccttc tccaagtacg 180

gcgacgtcat cgactccaag atcatcactg acagggagac gggccgttcc cgcgggttcg 240

ggttcgtcac cttcgcgtcg gacgaggcga tgcgccaggc gatcgaggcc atgaacggcc 300

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gcggcggcgg cttctgcggc ggcggcggcg gcggcggc 398

<210> 115
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003e10b1

<400> 115

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cttgtttggc cgctccggcc aggggcgagc tgcgccctct tgatttcagt gccgccacca 120

cggctacttt ggcattaaac tacggacggc gtcgcggctc cgtcggggaa tcagatcacg 180

tcgtgatcat catcagatta aaacaaacaa acgaacacga attcatcttt gccttgtcat 240

ctctgtctgg actgtgcgct gattggattc gatccgtgtg ttgtttgctt gcgtgcgcgc 300

agatggtccg cgattgccgc ccggctgccg gggaggacgg acaacgagat caagaacgtg 360

tggcacaccc acctcaagaa gcggctcgac cccggcgcgc aggagcagct cgaggaggcc 420

agcgccgcta agaagcgcaa gaagccggcg gcggcggcgc ggaagcgcg 469

<210> 116
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f01b1

<400> 116

cccacgcgtc cgcccacgcg tccgtttttt ccctcctact aaaataatga tcagtaaaat 60

caaaataaat acttggtaaa taaatttatt tggcaacaaa cattgttgaa tgttctgtgt 120

accttcattt tttcctgaag aaaaacttag taaaaacaaa attttaaatt atatttactt 180

ttttttatatt attgttcatg gcctgcattt gacccgcgca acagaaactt cacgcccgca 240

aaagcgccaa agtggtgata ctacattgac tggataaaaa ttctttgtgt tgtgtccctc 300

ttctttttt gagaacctgc gttgtgtcat cctaaacaat cactcacttc aagttttcaa 360

ctgctactat gaaagaaaaa atgcgcaccc ccagaccaaa 400

<210> 117
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f03b1

<400> 117

aaaaaggaac aacccccaa aaaaattaaa aaacacgggg gggggaacac caaactgttt 60

catcccccaa agaaggaaca aagccccaca aaaaaaaaaa aaccccgggc ggggaacccc 120

ggcaccccaa aaacacggtt aaaaaaaaaa aaaaacaccc cccacggggg gggccccact 180

gtcctaaagg ggaccccggg ggcccccaaa actgccacaa gaaaagggcg ccaccacccg 240

ggggggggggg ggtatataat gaaccccccc caccccgggg atgacaacaa cccgccggaa 300

actcctgggc ccccccccc ccc 323

<210> 118
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f04b1

<400> 118

cagggctcgc ctgtggcctc gcggggctcg ccgccggcat ggccattggc attgtcggtg 60

atgctggagt cagggctaat gcgcaacaac caaagctgtt cgtgggcatg atccttatcc 120

tcattttcgc agaagcactt gccctttacg gtctcatcgt gggcatcatc ctctcgtccc 180

gtgccggcca gtcccgtgcg gattaggcgc ctcgctctac cattctgcaa ttgccacaca 240

ggctacattc ttgagaagct ttctaatttt gatgtattaa ggagatattt gtagattatt 300

aaggaaggtg acacttccag taccgttttc attctttttg ggttgtggtg ggcgtttgct 360

gttcgtgcag aggattttgg ggtaggctgg attgctgctc ctgggaatat gggtttta 418

<210> 119
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f05b1

<400> 119

cggacgcgtg ggcggacgcg tgggcggacg cgtgggcgga cgcgtgggca atcccctcca 60

atcccacctt cggaacagca gccagcaagc gtcgccagcc atgtcgggcc gcggcaaggg 120

aggcaagggc ctgggaaagg gcggggcgaa gcggcacagg aaggtgctgc gcgacaacat 180

ccaggggatc acgaagccgg cgatccggcg gctggcgcgg cggggcggcg tgaagcgcat 240

ctccgggctc atctacgagg agacccgcgg cgtgctcaag atcttcctcg agaacgtcat 300

ccgcgacgcc gtcacctaca cggagcacgc ccgccgcaag accgtcaccg tcatggacgt 360

cgtctacgcg ctcaagcgcc a 381

<210> 120
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f06b1

<400> 120

gttttgcata tgccaactct gaccgaaatc tttggggacg attctgtatt acaatttggc 60

ggaggaactt taggacatcc ttggggaaat gcacctggtg cagcagctaa tctagtgggt 120

ttagaagcct gtgtacaagc tcgtaacgaa gggcgcgatc ttgctcgcga cggtaatgaa 180

attatccggg ccgatctcaa atggagtcct gaactagccg caccttgtga agtatggaag 240

gcgatcaaat tcgagttcga gccggtagat actattgata agtagataaa actcaagaca 300

aagaagacaa tgtat 315

<210> 121
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f07b1

<400> 121

cccacgcgtc cgcccacgcg tccgggagaa cggcgccatc gtgtcggcat tgaccggatc 60

atatggtttc cctggtagca cgtcgttgca tttggcagct cgcagcgggg acttggattg 120

catccggaag ctgcttgcgt ggggagctga tcggctccaa agggactctg ctgggtgaga 180

actagatccc tgccatgggt ctgccttaca cattgttggt gtatatatag cagcacagtt 240

tggttgctct gttggtaatc cagtagagta gactagccaa ttaacaagtg aactcactat 300

aaagcatttc ctgaatccat atttggaaag ttcactggcc cctgcttgta ctataacaaa 360

cttttatgtg ctcaattgat gaattaaatc ttatgtc 397

<210> 122
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f08b1

<400> 122

cgcgtgtgtt gcgagccatg gccggcgaga agaagatgtt cggcttcgag gaggtcgcca 60

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ctttcatgga tgagcatcct ggtggagatg aggtactgct ggcagtaacc gggaaagatg 180

caaccagcga tttcgaagat atcggacaca gtgattccgc aagggagatg atggagaagt 240

accacatcgg ggaaattgat gcttcaacca tcccagcaaa gcgtacattt gtacctcctc 300

agcaagggtc ccatgtccag gccaaggata gcgacctcct catcaagatc ctgcagtttc 360

ttgttcccat tttaatcttg gggcttgcat ttggtatccg gcactacagc aaatctgagt 420

aggctgttgt tggcgagttg cttcggagaa atagctttca agtaatat 468

<210> 123
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f10b1

<400> 123

agattccacc agcctcctcc tcctcttccc tcgccgcccg ccgcccgccg cccgctgagg 60

ttggtcgccg gacgccatgg cccccaccaa gaagtcgaag aagagcacgg agaacatcaa 120

caacaagctg cagctggtga tgaagagcgg caagtacacg ctcggctaca agaccgtcct 180

caagacgctc cggagctcca aggggaagtt gattatcctc gcaaacaact gccctccgct 240

caggaagtct gagatcgagt actatgctat gctgtccaag atcagcgttc atcatttcca 300

tggaaacaac gtggatcttg gaactgcgtg tggcaagtac taccgggtgt gctgtttgag 360

catccttgac cctggtgact cggacatcat caccaccgtt cctcagtgaa gacaagctta 420

cctatcctag cctaagatga tgtagtgtgg agagtcgtgc tta 463

<210> 124
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003f11b1

<400> 124

cttttacggc gacgacacca ggaaccacta ctaggccccg aggcggaggc ggaggccggg 60

caaaataaga ggtgtggcct ggcgggggcg tctcagccag gcagcggcta ccacgggcgg 120

gcgtgccgtg gtcttcttta tgacgaatga atgaatggat ggaagtggaa tggaatgaac 180

gaatggtgtt tgatgacggc ggtgggtttg cttggccgtt ttaatttgta cagtttgttt 240

tctccccctt tgttgtggcc gcttgcggcg gcgttaattt tagttccttg aagaagatgg 300

atgatgttgt atttcggaga gatgtatgca ggccggcgcg gcgtaacgcc gctcgtttgg 360

aatcccgttg gtttttaaat taa 383

<210> 125
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g01b1

<400> 125

tttcggcctt gctccacgcc gccagcacca gccgcggctc cctctccggc ggcagggccg 60

catcgtccag gaacgagtgg gtgctgtgca gggtgttcaa gaagagcctt gtaggcggcg 120

tagtgtcgtc ggcgccggcg tcgtcagcag caaagaaaag cggcgtggag atgatcgagg 180

agatagggtc gtccgtggcc gccgtcaccc cgctccctgc gctcctggac atgtccggct 240

ccggcgcctt cttcgacccg gcggcgcacg tgacctgctt ctccaacaac gcgctggagg 300

cgggccagtt cttcaacccg acggtgacgg gcggctgcgc cacggacacg gacaaccacg 360

gcctagcctc gtcatactcc ccgttggcaa gcttcacgca gtacggtggg cagctgcacc 420

acggcgtgag cctgagcctg gtgcagctcc tggagagcag cgggtaccac cgtggtc 477

<210> 126
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g03b1

<400> 126

tcgaaattaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaag gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaataaaat aaaaaaaaat aaaaaagggg gggggccttt ttaagggtcc caagtttcct 180

cccccgggct ggcaaggtat tatttttttt tttgggcccc 220

<210> 127
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g04b1

<400> 127

ctcggtcgtc tcagaggcca ggctgccgcc tctgctgcca aggccgacaa ggccacttag 60

agctatcgtt gctgtttatc tatgtttgct gcctctagat tacccgtcaa ggacatgtat 120

tgcaatatgg atgtcgtttt tgctcggtac tttggtaacg tggtgatatt tgttatcagt 180

tttcgctgtc gtggtctgga ttcgtcggtc cacataaaga agattgtgct tggtaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaatat aatgggggggg gc 352

<210> 128
<211> 292
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g05b1

<400> 128

tgcataactt agtccattca atccaataca taaagatata aggtctgtcc ccatcagacg 60

acacaagata acttcaaacg aacaacacgc caccaacaat acttttggaa ccaagctcgc 120

atcgtcgatt cttcttccta cgagaagcac ggggaacact acggcgacat atactaatac 180

tgataggtat aggtatgact tgctgcagag tcaggcggta ggaaaaggag cgaaggggaa 240

cggggcactc agatctgacg ggcaaagccg tctagttggt cttgttgggg ca 292

<210> 129
<211> 187
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g06b1

<400> 129

cccacgcgtc cgcaaaaatg gtggaccaca tatgattatt agattaggtt agaagtagcc 60

agattgaggg gtggggtttt ttcagattct tattagatta gtagtggaat ttctgcaatt 120

ctttaggtgt ttggagtcaa atatatactt ctgcttgatg attaattaaa tggatgctta 180

gttctaa 187

<210> 130
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g08b1

<400> 130

taactaacac aaaccgcata ggaggatacc gatcgatcat aggtggaact gacactgtga 60

cacacaccgc aacaaagctc cagctgagca gacgcaggca cgggggtgcc ggcgagagtg 120

gcgctgcgtc gctcgctcgc tcgctgctga cccgacactg ggcgtcgact ggccccgaca 180

acacttttat ttagcccacg tcacgcgcga ccccgcgcat agcgctccca ctccacacct 240

agtaaaaagc agtagcactc cactccactg gctgactcag catcacgccg tgccacgtag 300

gagcacacgg ccgccgccgt cgacgctgac cca 333

<210> 131
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g10b1

<400> 131

cccacgcgtc cgcccacgcg tccgaggaaa cttgtgggtc cttagatgaa tctacaaagt 60

tactcccaaa gttcactgtg aaacacattc tgttgtcctc taacctttgt acgttatgct 120

gtataagatc tgattatcaa tttatctgtt gggaatctac ccgcctatgg gtttcctagg 180

agtacagaca gaccaggtga atacctactg ggaaattgtt tgtaccatgg atctttgttt 240

gcgctgatgc agtttaacgg gaatagtggg ctttcaactt g 281

<210> 132
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003g11b1

<400> 132

cccacgcgtc cgctcctcgg ctgcacggac gggaagggag ggagaagaag gagcgcgaac 60

gctcagcccc atggcctcca tctcggtccc ggaccccgcc ccttccccga ccgaggatgc 120

agagagcatc agaaaagcag tgcaagggtg ggggacggac gagaacgcgc tgatcgagat 180

cctgggccac cggacggcgg cgcagcgcgc ggagatcgcc gtcgcctacg agggcctcta 240

cgacaagccc ctcctccgca cgctccagga cgagctctcc agccacttca agggcgcgat 300

gacgctgtgg gcgatggacc cggcggcgcg ggacgccaag ctggcctaca aggccctcag 360

gaagaagggc ggcgaccggc acgcctgggt gctcatcgag gtcgcctgcg cgtcgtcgcc 420

ggaccacctc gt 432

<210> 133
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h01b1

<400> 133

gggatggtgg cgccgggttc gtcggtctcc gccggcgtgg ttggctcctg cttcacaacg 60

gagttgagcc actgctcctc ctcttcgttc ggcgtcacct cccactccat catggcgggc 120

acagggccat agcctggagg ggcgaagtgc tcctcgtctt cgtcggcggg cgtcggcgtt 180

gggaggtccg ggtaggcgag tggctcgtcg atgacctccg gtttcggtgg tggagtggcc 240

ggcggtggag ggcacggccc gtacccgtgc acggggcaga aatcgcgggc agggcaaggt 300

ccgtatctgt gcaccggaca gaaggccacg cctgcatcca tgccgttgcc gaagaagatc 360

cctggc 366

<210> 134
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h02b1

<400> 134

tttcgcgatc gttcactagc tacacacaca tcacgtagct aagctaagca agaaagaagc 60

actcgccccc cggcgagcat ggcggcggcc ggatcagctg ctgctggtcg tcacaagttg 120

ggggaggaga agctgatcat ccggccggag aaggtgcggt tcatcgacat cctgtccctg 180

ctgatcctgc gccggcccat caccagctac gccttcatcg acgccggcga ccagacgacc 240

cacgacgtcg gcgtcacgcc gggcgacatc ttcgtcgtgc tcacccagat catccagaag 300

gccctcgctg ctgcctacta cccggcaaag ataatcgggg ccatcgtcga gctcctcctc 360

aacttcttcg ccctcaacgg aggcctgctc ggcatcgtat ggaacatcat cagatttaag 420

ctggtgatcc cgcgccggga ggcggccaac taccggacga tgatcgggat gatcgac 477

<210> 135
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h05b1

<400> 135

cccacgcgtc cgcccacgcg tccgcccacg cgtccggccg caccgcaccc gcacccgcac 60

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cggcggccgg cgtgcagctg ggcacctcga agccgcagat cgcgacccag gcggagatgg 180

cggaggcgcg cctgccgatc ccctaccgcg accagtgcgc gcacctcctc atcccgctca 240

acaagtgccg cgtcgccgag ttctacctcc cctggaagtg cgagcccgag cgccactcct 300

acgagaagtg ccagtacgag ctcgtcatgg agcggatgct ccagatgcag aagat 355

<210> 136
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h06b1

<400> 136

tcgccctctc gtccgcacgt ggtcgtgcgc gggggcgggg gctgcgacgt gcgcttcgcc 60

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gtgcgcgtcg acggggccgg ggaagtctcc gtgcggcggt gcatgtccgc ggacgtggag 180

cgcgcggtca cggtgagcat ccggaggtgc aaggggggccg cgcgcgtgca cggcgccgtg 240

gagctgcgcc tcgggcggtg ccgggaggcg gacgtgggca tctgctcgga cgtggcgctg 300

gggcggtgtc gcgaatcgcg cgcctactgg tgcggctcgc tcggcgtctc gcggtgc 357

<210> 137
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h07b1

<400> 137

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 53

<210> 138
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h09b1

<400> 138

aatttatcgg actattgcga gcggaacgag cagggcgagc tttggatgaa tcgatctatt 60

atcgggcaat cttattggga ataacaaggg cttccctgaa tacccaaagt ttcatatctg 120

aagcaagttt tcaagaaact gctcgagttt tagcaaaagc tgccctacga ggtcgcattg 180

attggttgaa aggcttgaaa gaaaacgtag ttctgggggg gattatacct gttggtaccg 240

gattccaaaa atttgtgcat cgttccccac aagacaagaa cctttatttc gaaataaaaa 300

aaaaaaatct attcgcgtcg gaaatgagag atttttttgtt tctccataca gaattagttt 360

cttcagattc tgacgtaaca aacaattttt atgagacata agaaccccca atatgttgta 420

cacacacaaa ttatgtaaaa acaatcaacc atttactgaa catttggaat aagcgtgaat 480

acatttgtgg aat 493

<210> 139
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h10b1

<400> 139

ctcttagcaa gctatatacc tacatagtac agccatggcc cccaccgtga tggcctcgtc 60

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ccgctccaac ggcgctagcc tcggcagcgt cagcaacggt ggaaggatca ggtgcatgca 180

ggtgtggccc attgagggca tcaagaagtt cgagaccctg tcctacttgc caccgctcag 240

cacggaggcc ctcctcaagc aggtcgacta cctgatccgc tccaagtggg tgccttgcct 300

cgagttcagc aaggttgggt tcatcttccg tgagcacaac gcatcccctg ggtactatga 360

tggccggtac tggacaatgt ggaagctgcc tatgttcggg tgcaccg 407

<210> 140
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h11b1

<400> 140

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gcaggaaccc gctgatgact aggaacctgg agaggaacgg caggatcacc tgcatgacgc 180

tcccgcggga ctggctgcag agggacctga acgagat 217

<210> 141
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189003h12b1

<400> 141

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

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ctcctttcca ggggctcaag tccaccgccg gcctccccgt cagccgccgc tccaacggcg 180

ctagcctcgg cagcgtcagc aacggtggaa ggatcaggtg catgcaggtg tggcccatcg 240

agggcatcaa gaagttcgag accctgtcct acttgccacc gctcagcacg gaggccctcc 300

ttaagcaggt cgactacctg atccgctcca agtgggtgcc ttgcctcgag ttcagcaagg 360

ttgggttcat cttccgtgag cacaacgcat cccctgggta ctacgatggc cggtactgga 420

caatg 425

<210> 142
<211> 116
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a02b1

<400> 142

acgatagata cttttgataa agaagataaa actaaagata aagaagagaa ggtataaata 60

aaaaagaaac gaataaataa aaaaaaaaac tgggtggctc ttttttgggg acccag 116

<210> 143
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a03b1

<400> 143

aggcggtgga gctgctggcc gagaccaaca tgccgctggg cctgctgccg ctggcagaca 60

tcgaggaggt gggctacaac cgcgccaccg gcttcgtctg gctgcgccag aagaaggcgc 120

tcacgcacac cttcaagcag atcgggcggc aggtctcgta cggcaccgag gtgacggcct 180

tcgtcgagga ccgcaagatg aagcgcatga ccggggtcaa gagcaaggag ctcctcatct 240

ggatcaccct ctgcgacatg tacatcgaga aggacgatcc ctccaagatc accttcaaga 300

cgcccacagg gctggggagg accttccccg tctccgcctt cgagaagcag gacgacggca 360

aggccaaggc cgcggctgcc gacggcaagg aggccgtcgt ggccaagtag gtgaggacgg 420

ccggcatact ctacaaagtt tggatgaaga gtcctcgagt ccaatattaa ctatatac 478

<210> 144
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a05b1

<400> 144

tctccattgg cttcggcccc gccctcgcca gcttccgcct cggcgccgtc gagtacgcgc 60

tccgggccat cccgctcggc ggctacgtcg gcttccccga cgacgacccc gagtccggct 120

tcgcgcccga cgaccccgac ctccttcgca accgccccgt cccggaccgc ctcctcgtcg 180

tctccgcggg ggtcatcgcc aacctcatct tcgccttcct catcatctac gcccaggcgg 240

tcaccgtcgg cgtccccgtc caggcgctgc tctccggcgt cctcgtcccc gacgtcgtgc 300

ccggctccgc cgccgcgcgc tccgggctgc tcgccggcga tgtcatcctc gccgtccccg 360

gcgccgcgcc ggacccatcc gtgccggccc tggtcgacct catcaaatcc agccccaaca 420

aga 423

<210> 145
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a06b1

<400> 145

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cagtgctagc cttggcagcg tcagcaacgg tggaaggatc aggtgcatgc aggtgtggcc 180

catcgagggc attaagaagt tcgagaccct gtcctacctg ccaccgctca gcacggaggc 240

cctcctcaag caggtcgact acctgatccg ctccaagtgg gtgccttgcc tcgagttcag 300

caaggttggg tttatctttc gtgagcacaa cgcattctct gggtactacg atggccggta 360

ctggacaatg tggaagctga ctatgttcgg gtgcac 396

<210> 146
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a07b1

<400> 146

tatacctaca tagtacagcc atggccccca ccgtgatggc ctcgtcggcc acctccgtcg 60

ctcctttcca ggggctcaag tccaccgccg gcctccccgt cagccgccgc tccaacggcg 120

ctagcctcgg cagcgtcagc aacggtggaa ggatcaggtg catgcaggtg tggcccatcg 180

agggcattaa gaagttcgag accctgtcct acctgccacc gctcagcacg gaggccctcc 240

tcaagcaggt cgactacctg atccgctcca agtgggtgcc ttgcctcgag ttcagcaagg 300

ttgggtttat cttccgtgag cacaacgcat cccctgggta ctacgatggc cggtactgga 360

caatgtggaa gctgcctatg ttcgggtgca ccga 394

<210> 147
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a08b1

<400> 147

agcggcctca tttgccacgg cagaggtagc attcatcctg caatcagccc agggccgtgc 60

ccttcagttt accatcgctc cagactcccc aaccacccca cagcatgagc cacagcagca 120

gcagcagcaa cagcaatagc taaacgaccc agtagttcca caagtactgg cataatgcgt 180

gcttgaagat gtaggtctgg gtgcctattt tgctgttggt gctggctcct caggaatgct 240

aggaagcctt cctgtggcca cgtaaaaacc tcgtatggtg tcagagtctt atttgtctcg 300

agcaatgtga ctaaacctgt gtgtctgaat gtaatttaag cattgattta atgtaaattt 360

aacatctatt acctttacta ttttggtgca acccgagtct tgtgctctaa gcgcaatgat 420

ttgatggg 428

<210> 148
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004a10b1

<400> 148

gcaaacttat cttgaggcta gccaccatga agacaatgtt catcctcgct ctcctcgccc 60

ttgcagcatc caccgccatt gcccaattgg aaaccatatg tagccagggc ttcggacaat 120

gccaacacca ccaacaacta gggcaacaac agttgctgga tcagatgaag ccatgtgtgg 180

ctatcgtaca acatcagtgt agcccagtga gaacaccatt cccccaaaca cggggagagc 240

agcatagcag ttgccaaacc gtgcaacacc aatgctgtcg gcagctagtg cagatcccag 300

aacaagcccg gtgcaaggcc atacagagcg tggaagaggc tatcattcaa caacagcccc 360

aacaacaatg gaatgagccc caacaggaag cacaccttaa gagcatgagg atgtcgcttc 420

agaccctgcc gtctatgtgc aacatctacg ttccggtaca atgccagcaa cagcaacaac 480

tggggcgaca acaacaacaa cag 503

<210> 149
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b01b1

<400> 149

cccacgcgta cggtgggttc taggttagcg cgcagttggg caccgtaacc cggcttgcgg 60

ttcatcccgc gctggattcc ttttgcagaa ggaacttgac tacctggatg gagctgtttc 120

aaaccctaag cgcccattcg ctggcattga gggtggctca aaggtggcgg ccaagattgg 180

ggttatcgaa accctggtgg agaagtgtga tatccttctt ttgggtggtg gtatgatctt 240

cacattttac aaggcacaag gactctcagt tggttcttcc ttggttgagg aagataaact 300

tgagctggca acatctgtcc ttgcaaaggc aaaggcaaag ggtgtgtccc ttctggtgcc 360

atctgacgat atcattgctg ata 383

<210> 150
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b02b1

<400> 150

cctgcaaagc ctgctgcagc accagctgcg aagcccgcac ctgctgagaa accagcaccg 60

gcagctgctg atgtagccaa gcagattcca gctggcattc caggtagccg ggcgaacaac 120

tattaccgtg cagatggcca gaacacgggc aacttcctta cggaccgtcc ttcaaccaag 180

gttcatgctg ctcctggcgg tggctcgtcc ctgggctact tgtttggcgg aaagtgatgt 240

taatgatggt gcctgcttaa tgaacgagcg atgaattggc ctgtatctct gttatccatg 300

tggtgaaaac tggaagtgtt tggtttgagc agtttaccac ctgcgtcgat gtactctgtc 360

tgtatggttc attgtgtcca agctgacc 388

<210> 151
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b03b1

<400> 151

cgctgggtat ccgcaatatc ctcctacgac ccaccctcca gctggttatc ccgctcaagg 60

gccaccaatg caggttcctc cttatggtca agctcctatg tacgggggag gcagccatgg 120

cgtagcaggc ggtatgattg ccggcggcgc ggcagcggca gccgcagcat atggagctca 180

caaggtgtca cacggcggcg cccacggaat gtacggccac gggcaccacc acggcaagtt 240

caagcatggc aagttcaagc acggcaagtt tggcaagcac aagaagatgt acgggcgcaa 300

gtggaagtga agaggggaaa agatacggct actcggatgt acgtacgtac tacgtagaca 360

acatgtagac ccgtataatt cgccatcttg ctctctcaca tctcaccaat gactcctcgc 420

ttgtgccgct cagaagggga aaaaatgtga tcacct 456

<210> 152
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b04b1

<400> 152

gagcaatttg ttttcctgaa catggctgta gctgtgcgtc aagctcaaac catttgttta 60

tcttagtttt gaacaaaaga aatcttattg tcttatgtaa attctgttta ccgatgtagt 120

tggatgctac caaatggatc tttgaatgtt gaaatactga tgttttgagt cattatgtgt 180

ttgagatccg gtac 194

<210> 153
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b05b1

<400> 153

gctatatacc tacatagtac agccatggcc cccaccgtga tggcctcgtc ggccacctcc 60

gtcgctcctt tccaggggct caagtccacc gccggcctcc ccgtcagccg ccgctccaac 120

ggcgctagcc tcggcagcgt cagcaacggt ggaaggatca ggtgcatgca ggtgtggccc 180

atcgagggca tcaagaagtt cgagaccctg tcctacttgc caccgctcag cacggaggcc 240

ctccttaagc aggtcgacta cctgatccgc tccaagtggg tgccttgcct cgagttcagc 300

aaggttgggt tcatcttccg tgagcacaac gcatcccctg ggtactacga tggccggtac 360

tggacaatgt ggaagctgcc tatgttcgga tgcaccgacg ccacgcaggt gatcaacgag 420

gtggaggagg tcaagaagga gtaccctg 448

<210> 154
<211> 394
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b07b1

<400> 154

cccgactcac caccgcgcct cttcctcctc ccgctcaccc acccatggcg acggctatga 60

tggctgcagc caccacctcc tgctccccgc gccgagcgct cctcaagccc gcggcctcct 120

ccagctccgc gccgccgccc aggccgcagc ctcggtcctt cctcaagcag ctcccggggc 180

tcgccgcgac ggcggctgcg gcggccgtcg cctccgtgcc tctcccggcc ctggccgtgg 240

agatggagaa ggcggcgctg ttcgacttca acctgacgct cccggcgatc acgatcgagt 300

tcctgctgct gatggtggcg ctggacaagc tctacttctc gccgctgggc aagttcatgg 360

acgagcggga cgccaagatc cgcgcggagc tcgg 394

<210> 155
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b08b1

<400> 155

caggcaccaa cacagctagc attagcgcca ccaccaccac ccatctgccc catcaccacc 60

tctcaatcac tactgccagt agctagctta agcttgcagc tgctgcttgc gctccgactt 120

caagcttttg attcgccggc atactcaagc taagcttctc atggcgccgg cgtcgaaggt 180

catgagtcac atcgtccaag acggcggcat tgccacctac gccgtttacg ccgcgccgtg 240

tgatgcctgg tgcagcgggc ggcataggaa ggccgagacg gacggcgacg acgacgatga 300

cgactatgac tgcgcgcctg ccgcctgaag tgtacgtacg ttcgtacctg gtcgccggcg 360

aaacgaatct gggacctgcc cgccaagagc tagtatatat actgcgaact gatcgctgct 420

gctgtgtatg ctaatacgat gtcaagtacg taggtacgta tatgcgtctg tttacagcta 480

cttatgaatg tatcccccct agtatatga 509

<210> 156
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b09b1

<400> 156

cgtcgtttca tggcgctcgc cgacgtggcg gacgacgtgc accggtgggt gcgtgaggcc 60

gcgacggacg agcacttccg gggcttgatc gactgggtgg aggcgctgcg gcccaaaccg 120

gccgcggcca gggcgtacct gggcggcacc ggcggcacca aggcgacggc gtgcatcgtg 180

tcgtcgggca tgggttttcc ggtccgggag atcaactttg ggacgggcct gccggcgttc 240

gcttcgtacc acttcccgtg gcccgccggc gcggcatacg tgatgccgat gccgagtgcg 300

cgcgacgacg gggaatgggt ggtgtacgtg catgcagcgc cggagctggt gaaggtgatg 360

gaggaggagc cgactgtttt caaagttctc gagaacagct acgtgttcgg atg 413

<210> 157
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b11b1

<400> 157

cccacgtgtc tggaggttgg atagcttggt tgaaaaaagc tcagacctga gtgctgcttc 60

acagatgttc tataagcagg cgaagaaaac aaacagttgt tgtactatac tttgaagttt 120

gaagtgtgat cctgcaatta tcttggaagg ctccaggtta atgctgtttt ccgacaaaga 180

tcctgatact gttatacttg ctccttgtac cttcagttac gcctctgctc ccgtttctca 240

gaaagaaaat caaccggata ttgttgtgct gtactaagtc tggttgccca tgaaagtgtc 300

tgtgaggcac gggatcaata ctgtaaatct gttattcttt ggtgacgcct tcgaatagca 360

actaacatca cttagcaatg gccaacatca ttgtcttccc tgcttagatt gtcgctatct 420

catttctcaa gtatgttgga gcacagctgc tgcccttaca ttatgtactg tatgt 475

<210> 158
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004b12b1

<400> 158

tatcccttac ttggtcttgt gttgttaaag agagccgcac tattttgtat cgatgagtct 60

tgctgttaat gacctatttg tcgtgatact gggaactatg ttttgagatg tctggtgatg 120

taacggatgt tttacttaga ttatgtatct gttgtcc 157

<210> 159
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c01b1

<400> 159

gagttacaat ggtctccgac cgcctcagcg ccctccgggc cttcgacgac accaaggccg 60

gcgtcaaggg cctcgtggac gccggcgcca ccgccatccc ggccattttc caccacccac 120

ccgacgcctt cgccccgtcc actgtcgcca ccgacgtcgc cgttccaatc gtcgacctct 180

cctgcgagcg ctcggccgtg gtcggcgcgg tgagggccgc ggcggagacg gtgggcttct 240

tcctgctggc gaaccacggc gtgccggagg cggccatgtc ggggatgctg gcggcggtgc 300

ggcgcttcaa cgaggagccg gcggaggcca aggcgccgta ctacacgcgg ggcgcggcca 360

ggcgcgtgcg ctacagctgc aacgcggacc tcttccagac gctggtgggc aagtggcgcg 420

acaccgtgta catggacgac gc 442

<210> 160
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c02b1

<400> 160

catgtattaa aacgatatgt gtagttgtac atataggcca cgcttggttt gatgtgggcc 60

ccacaattat attttcattt cgaacgaagg aaatcgtaga agtaacttga gcctgcatag 120

gttctatctg taactcacca atccggaatt aagtttgtta agaagccacg ttgctaagaa 180

tactaactag ctcactgcct ttgaactcct tgtatttctg caggtaggat agaagacact 240

ttttccaggt ggttccaaca gttgggggac agcagatttt gtgtggtgct gcgagtgaaa 300

taaactactg tacactgtaa aggcaaagac agaagttaca aatgtgttcc cttttccatt 360

tcattctttt ggaggggtg cgtccgtgcg tggccaggtg gcgcatgata acttggatag 420

taaggatata ttatctccac aggaagtcct caatacgata cacatagaaa ttcat 475

<210> 161
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c03b1

<400> 161

gcccttggat tcgggtatgc cgcctccacc ttgagtgcta ccttcatcaa tggcgtcctt 60

ggcccccaga ccagaccgga aaatgatacg gcgcgcatgt ccatctacat cgagaacatc 120

cacaagggca tccatgggag cgattcaggc gcgtatgact ctcaaggaag gttcgttccc 180

gagaagttcg aggcggcatt cgccaagcac gccaagacgg tgccggacgc cctgacgtcc 240

gcggaggtgg acgagctgat caccgcgaat cgggagccca gcgactacgc gggatgggcg 300

ggcgcgtcgg cggagtggaa gttgctgtac agcatcggca aggacaagga cgggctcctc 360

cgcaaggacg ccgccagggg cgtctacgac ggcagcctct tcgccagggt ggtgcaggag 420

cggaggacat ctataggaga aacccaggca tgatc 455

<210> 162
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c04b1

<400> 162

ctagagccac agctacagca atggaagctc tcgcctcgtc gccgcgggct ctcttcgccc 60

gcaccgcctc tccgacgacg gcgctggtca cgccagcaag atggacgccg tcatcgagca 120

ggcgtgtcaa ggccgccgcc gccgccgagc cggccggcga ggcgaagccg gctgccgcag 180

cggcgccgtc ggcacccaag aagatcctca agaagaagcc cgtatactcc atgaagaaag 240

ggcagatcgt gcgcgtcgag aaagaaaagt atctgaacag catcaattac ctatcagtgg 300

ggcacccacc cttctacaag gggctagact acatatatga agaccgcggc gaggttttgg 360

acatcagaat ctttgaagag accggagagt atgctctgat cgcgtgggtg gggattccaa 420

ccccgccggc atggctccca acttatatgc tcatcaagtc agacaaactc gact 474

<210> 163
<211> 92
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c06b1

<400> 163

gatcttgttc tcgatggttc tgaaattatg cgcgcaactc ggagatggag tcctgaacta 60

gccgcagctt gtgatgtgtg gaaggtgatc aa 92

<210> 164
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c09b1

<400> 164

gcgcaatgtc tggtacccat gtacgtggcg accaagatgg cctcgatcag gcaggcgtcc 60

ctgttcgccc cgtcgccgga gacgtacgcc cgcgccgccg tgcgctacat tgggtacgag 120

cctcggtgcg cgccctactg gccgcacgct ctactgtggt tcctcttctc cgtggtgccc 180

gagcccctcg tcgatgggta cgtcctcggc atgtccctcg gtatacgcaa aatgggccgc 240

gccaaggagg ccaggaagaa agcggtgtga cacgcgcggt ggaagaaagg gcacgtacgg 300

tcgtaaagat ggactcagat gaatgtgtta attctacaat cttcatgacc aattgtaaca 360

cgacgaacga ctgaatgcag cctcccttgc ccttccaaac agttttatct gtattaagac 420

ttaattcgtg atattt 436

<210> 165
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c10b1

<400> 165

cccacgtttc tggttcgacg tggcggggta caccgagggc ttcccgcgcc tcgtctactt 60

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cttctcctac gcgcgcgagg aggagggcct cgacgtcagc ctcaccggta ccggcacgca 180

cctccgggtc ttcctgcagc ggtggatcgc ggatcatcct gagttcgcct acaacccgct 240

ctacatgggg ggcgactcct actccgggta caccgtcccc gtggccgcgc tcgagatcgc 300

cgaccagccg gataagggag gcctgaacct caagggctac ctggtgggca acgccggcac 360

cgacgacaag tacgactccg gcggcaagat ccccttcatg cacggcatgg ggctcatctt 420

ccacgagctc ta 432

<210> 166
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c11b1

<400> 166

cccacgcttc cgcccacgcg tccgcccacg cgtccggcgc tacatcaaga acctctctgc 60

caagcttgaa ggggatgacc tagatgtttt caagaagaat gttgagtctg ccacaaagta 120

tcttcttagc aagctcaagg accttcagtt ctttgttggc gagagcatgc atgatgatgg 180

cggcgtggtg ttcgcctact acaaggaggg agctgctgat ccaactttcc tgtactttgc 240

acatgggctg aaagaggtca agtgctaatc gcactgtatg ctaaaatcta tgcggtcgtc 300

agtatttttg ctctgctcta tggttgtcag tcgactctcc aatgttgtgt cggtaactat 360

cagatgttga gtgtcttgaa aactttctga taattgtggg at 402

<210> 167
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004c12b1

<400> 167

ggacctttct gacaagccca tggggctcgg cgtgcggtcc cgccgctacg tgctcctggc 60

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cgccgaggag atgctcaagg cgctctgagc cgcgcctgct ctgctccttg cctgagtcgt 180

gtctagtgct ccggagtagt gaataataat ccgacgaact gttgctcgtg tgagtgtcct 240

tcgatgcgtc gacatcgtgg agaggatttt gttttgtttt gttgagaatt gcgtgctgtc 300

catgtgctcg atgaaatgac ttgaattttt c 331

<210> 168
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d02b1

<400> 168

gtgtatccga tgacggtggc cgccgcacgc tgcctcattc tcacccccac cgtctcctcc 60

acctccttct cctccgccgc gctccggcta ccccggatcg cccgccgccg cccgctctcc 120

tgctcggcct cgccgctcgc cgtgttcgcc accatggact cgccgcccga gggctaccgc 180

accaacgtcg gcatctgcct cgccgacccc tccctcacca agatcttctc cgcgtccagg 240

atcgacatcc ccacggcgtg gcagatgcct cagggtggga tagaccaagg ggaagagccg 300

cgagcagctg ccattaggga actgagggaa gaaaccggtg tcagatctgc cgagattgtc 360

gccgaggccc ccaattggtt gacatatgat ttccccgcgg atgtcaaaga caagctgaat 420

gctaggtggg gaaccaactg 440

<210> 169
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d03b1

<400> 169

agtttataca gatgcaataa tatggcacac aaaaaagaag gaagtagcag ctatttacaa 60

gagcctcgca gtgtgcaata tagctacgag atcctattgt ctgttggaat ttcactttag 120

aacggttggt tttattcttc aaacagttag cctagaagaa gatacacttg taaggcacat 180

acataaatac aagttcaata tgtggtctga tcaaatacat atagcctacc tgatactttc 240

gatc 244

<210> 170

<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d05b1

<400> 170

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tgaaccacca tacacagaat atgtgtcaac tcgctggtat cgtgccccag aggttctact 120

tcaagcttct gtttacagct cagcagttga catgtgggct atgggtgcca ttattgcaga 180

gctttttttc gcaccgacct cttttcccag gctcaaggta cacatgatcc tttttctgct 240

gagcctcatt tggttccccc attctcttgg ttgttgtgcc caatttaatt gaagattttt 300

aagttggtcc taatagtttg ctgggagcta aatattaggc aaagatgctg ttgattatat 360

atgaaataac catcatcggc cactttaata agtgaaccca ttttttgtat agtctagaaa 420

gcaccccata atgtgaaaa 439

<210> 171
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d06b1

<400> 171

gaagaagttc tgttttattc tgatgaagcg cgcgccaaac ggcgcgagga attcaatcgc 60

actgaagcaa gttttgagca gagcatgaag gatatacaga aagatttgga ttttttgaaa 120

gaacttcaca gtcgtgaatg gcctgatcct gaagaaaatt tccgcaagga gcttcgcaaa 180

tttgagaaga aatgtgatat tgctcttctt gtactcgtgc ctacaactgc tgtgctcttt 240

atgagtatac catattacct ttagcgggtt ataagaaaca cactatctta gttttagcta 300

tcctggttgt agtgatcgag gctttaggca ttattaagta cgtagctatg tattatcctg 360

gtttgactcg tgtaatctga atgcacctac ttacactaaa cagtggatgc tactcgtcga 420

attcccatgg ctgtatactc 440

<210> 172
<211> 433
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d08b1

<400> 172

cacgcacttt cactctcctg ccgcggtgcg ccgtacgtgc tctctagcca agatgtcgtc 60

ggtcagtgcc cgcgctcccg tggccgctct ccggccggcg gcgtcagcgt cgagcccccg 120

gttcctgggc gactccggcc gcgtcggcct cgccaagtcc acgcgccgcg acgtcgccgt 180

ccaggccaag gggtcgtggc tccccggcct cccctccct gcctacctcg acggcagctt 240

ggcgggtgac aatgggttcg acccgctggc gctggcggag gacccggagg acctgcggtg 300

gttcgtgcag gcggagctgg tgaacgggcg gtgggcgatg ctgggggtgg cggggatgct 360

gatcccggag gtgctgacca aggcggtgct gctgaacgcg cccgagtggt acgacgccgg 420

caaggagacc tac 433

<210> 173
<211> 134
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d09b1

<400> 173

cccacgtttt cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggggggccg 120

ttttaaagga tcca 134

<210> 174
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d10b1

<400> 174

gtcagttcct tgctgtactc cagtctagcc gagatgtgta cgtgtgatgt gcctgaccta 60

cttgttcagg caattaatga atagtaatta ttttcct 97

<210> 175

<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d11b1

<400> 175

gtgtactctt tgttcgtgtt cgaggactac atgaacctgt acttgctcca caagttcgag 60

gccaaggagc cgcgcttcca ggccatgaag gcggacgccg cgcccatcgc caccgcgtga 120

ttagggacgt ggtcgtacgt gccagagtcc ccgaacaaga gtattttggg acgtattgaa 180

gtggtgtatc gtagataatt tgtgtatgcg tgtgtaatgt tttcgctggt ggcttcgcag 240

tgcgccagtg catgccgtga tgcttgtttt accgtacgtg tgagtcaact tctttttata 300

gtatgtgtgt taagtaatgt 320

<210> 176
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004d12b1

<400> 176

atttagttta cttcatggat tgatcactta cctttatgta gctaacacaa atatatgtat 60

gtgccagctc agagccactt gatcc 85

<210> 177
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e01b1

<400> 177

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gagcgggtcg ccgcgtgccg gccgggggac ggaccgggaa tcgccccttt gggggctttc 120

cccgagcatg aaacagtcga ctcagaactg gtggaccata cagtacggat gatgcaataa 180

ttgaagatat gaagaaggat tacatggtcg cgcaagagat caaggagaat aacaaataag 240

ctttatgcaa tggataattt gcaaggcaag gttctccatg cttgtatgta cgttgctgct 300

tttggaattt ggcagttgct tactggtcat gtttggtgat tgatgctgaa ttcctagata 360

cattttgtaa acatttggat ttgtccaggc gcatgcctgt atgtactaga tgtgtacttg 420

ttttcactta tctgcaga 438

<210> 178
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e02b1

<400> 178

ccctttcgtc cgcccacgcg tccggccaca cttcttctcg aaacatccat ccagcaccgt 60

cgccggcgac ctcacccgcc gccgccgccg aagatgccgg tgagggtggt cgacaccgcc 120

acccccttcct cgcagacctc ctcaggacaa gatgcaaatg ctgtgcagcc gtctcctcct 180

agctgttcac tcttaactgc tggaagatgt tttgcaggaa ctcagaatgt ttcaagttta 240

caaaaagatg aggcatggaa agtcaatgtt cgtatccatg gttgtgatat tgaacagggt 300

tatttatgtg gaacgatgga ggcacttaat gttcccttag ccgacacacc tgtggttaca 360

ttctgggagg gggagatagt agatgctaaa aattatactt tttttactgg caagtgggag 420

gcatcagcag aggatgatgt aagacactgg t 451

<210> 179
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e04b1

<400> 179

cccactcgtt cgcccacgcg tccgagaacc aggacacgcc cacggtatac gcacgtacag 60

ctcgatcgca atggcgtcgc tcgtcgccgt ccagccggtc gccgtgcggg gcctggccgg 120

cagctccatc tccggccgca agctcgtcgt ccggcccgcc tccgccgccg tctcccgctc 180

cacccgcagg gctcgcgggg cggcggtggt ggccaagtac ggggagaaga gcgtctactt 240

cgacctggac gacatcgcca acacgacggg gcagtgggac ctgtacggca gcgacgcggc 300

gtcgccctac aacggcctgc agagcaagtt cttcaacacc ttcgccgcgc ccttcaccaa 360

gcgagggctg ctgctcaagg tcctgctgct c 391

<210> 180
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e05b1

<400> 180

cggtctcttt gggtgtcgga cgatgactcc gacgactccg acagcccgcc agggcccgcc 60

agctcgccag actcagactc gccagctgac tcgcctgacc ccgccgcaga cgacgaggag 120

agcggcagcg tcggcgtgag gagtggcgtg gtggcttccg tcgtggccgt ggccacctca 180

gcctccgtcg tgcttttatt ttagaacatc gtagcgatgt caaatgtact acttaggttg 240

tagacataaa ctttttggc aatctgtact cagttttggg tgaaatttca ggcgcgggtg 300

agtaattatg tggc 314

<210> 181
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e06b1

<400> 181

ttctttttct ttcagtgatt tgaaggtcac tggaattcat cctctgaagg aaggcaaccc 60

tccaaagtat tcacagaggg tccgtttggt tgctgcgaac tatcaaatag tctaaagcca 120

taattaaagc agttactgct gtttcttgtt agtggcacaa ggagtataat tttgcatcaa 180

atttgtttaa atatgtgtga tttggcctgt cccataccta gcgtgtcgca ccattgagaa 240

ataaaagcat gaattctcct gtaccctgtt tgtagtattc cttgtgagat tgttgtttct 300

gtttcgtaca tg 312

<210> 182
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e09b1

<400> 182

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gtccttatga aggttttttt tttaagaaat agtaataaaa taaccttgat aatgaccagc 120

gagggcacgt acagacgaac agacggccct tacactgaac aacacaacgg atgggtgcag 180

cacacgcact gcatgtgcac atccaaatta catacacaaa caaaagtcgc gatacttaat 240

caaacgcagc agcatacgcg cgcgcgcgcg catgcaggag ctccgggcgg ccgggcgatg 300

cgatcgatcc tgcccgccca ccgcaggagc catgcacgcg tgcatgtaag cacggggtaa 360

ccggaggata ttatttaatt agtactc 387

<210> 183
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e10b1

<400> 183

gttgtgttgc aatttcccca tcttttgtgc tgaaccttag ttcgtggatg gcagctttgc 60

cccattaggc atttagacta ggtgagttag ttgtcttttt tttatttttct ccctttttatg 120

caaccttgga tattttgtga cgaaggtgtt cagcgaacct catgtttcga tgcacgaacc 180

caatgtctac ccccaggaaa ttcaatttgt atgaggtagc gaatcatgaa tcaggcaact 240

atgctcataa tc 252

<210> 184
<211> 125
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004e11b1

<400> 184

gtggctcatg tagggaatat gtctctgtaa atacggtata ctgctgcttg taaatatctg 60

aacttggaag cacaaggtgc actggctatg agcaccaagg aggaaggaaa taatcagaat 120

ggatt 125

<210> 185

<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f02b1

<400> 185

aaattattga aaggggatat caccatgttg agttcaattc taaatgttat tgcatctaca 60

atgaggttgt ctatgaaaag gaagatatac caaccgcatt ttaccttgtc cctccatggc 120

atatttaagt tgtgccaagc tattgatggc aattcaagaa gtatcgaact taagccatca 180

atggagcttg gtactgatgt cgtccttatg aacggtcctc tgccaatttt ttctgaaatg 240

gataagtcaa gaactgtgat ggttgtttcc tgggtaactt ccaatatctt ctggttgtgt 300

aaacaaaagt ctgcagcgga aatgtcatgt gaagagccac taaacaatga gtgtctacta 360

tcaaagatat tgcgttggtt agtggcttct gtaatccttg gcagaatctc ccgcatctct 420

cctgaaaaga ggggaggtct tgccacgagc acaaatagtc ccggaactct tc 472

<210> 186
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f03b1

<400> 186

gttcgtccga cgacatggcg gccggagcag ctggaggagg gagtgacgag ctcaagctgc 60

tgggggtctg ggtgagcccg ttcgtgcacc gggtgcaggt cgcgctgcac ctcaaggggc 120

tcaccggcta cgagtacgcc gaggaggacc tcaccaacaa gagcgacctc ctcctcgcct 180

ccaaccccgt ccacaccaag gtccccgtgc tcctccacgc cggcaagccc gtctgcgagt 240

ccatgctcat cgtgcagtac ctcgacgagg ccttccccgg ctccggcccc gccctcctcc 300

ccgccgaccc ccacgaccgc gccgtcgctc gcttctgggc cgcctacgcc gacgaccagt 360

tctttgcctc gtggatcaag gcgttcgtgg ggacgacgga cgaggagagg gcggcggcga 420

cggaagccgc ggtggcagcg ct 442

<210> 187
<211> 391
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f05b1

<400> 187

ctctttttct ggatgatcgc cggcatcggc gtcttcaact tcgtctactt catgatctgc 60

gccaggtggt acaggttcaa ggggaccagg gatgcttgat gcaatttgga tgatcaaaag 120

aaggggggtag aataaggtca ggtgattaat tcacgtgtct tataccacag tagctatttc 180

ccttttgcgt tcttataatt ttttggttct gctgttatga aatcgatcaa tcaatctata 240

gatgaagtgg gcggggaaag agaggaagaa atgtactgta gacaacagtg gggtggttaa 300

ttccttgtaa gttgttaaaa atgaaagaaa caacaatggg gtggttgatt tcttgtaagt 360

tgttcaaatg aaagataaac gatttcactg t 391

<210> 188
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f06b1

<400> 188

cagtggttgg cctcccgacc cctatcttct cccccactaa tccccccatt cccctcgccg 60

ccgccgccgc cgccggcgtc gcctgcccaa gatgaatgtc gacaagctga agaagatggc 120

cggtgccgtg cgcaccgggg gcaagggcag cgtgcgcagg aagaagaagg ccgttcacaa 180

gaccacgacc accgatgaca agaggctcca aagcaccttg aaaagagtag gagtcaacac 240

cattcctggt attgaagagg tcaacatttt caaggatgat gtagtcatcc aatttcagaa 300

cccgaaagtg caagcatcta ttgctgcaaa cacatgggtt gtcagtggaa caccacagac 360

gaaaaagctg caagatttac tgccgacaat tatcaaccaa ctgggccctg ataacttgga 420

caacc 425

<210> 189
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f07b1

<400> 189

catatacttg agagagcgca cgcgagatgg cagcctccat gatcacctcg ccgattgtgg 60

cgccgacgag cgtgccgtcc ctctcccgcc ggggctcctc cttcgccgtc gtctgcagcg 120

gtggcaagaa gatcaaggtc gataagcccc tcggactcgg aggcggcttg acagtcgaca 180

tcgacaccaa cggcaggaag gtcggcatga agggcgtgta ccagtttgtt gacaagtacg 240

gtgccaacgt cgacggctac agcccaatct acacgccaga ggaatggtct gagtctggtg 300

accgctacgc cggcggaacg accgggctta ttatatgggc cgtcaccc 348

<210> 190
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f09b1

<400> 190

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gcagtagtgg cctcgtcaca tgggcgcgcc ttgatgttgg tggtttctag cacaacactt 120

gcattgatgg ggacgattcg ggcctgaatg cgtgtgtgag acacaatgcg gcgtggcatt 180

gtaggtcgtc tagttcagat tctttagcat ggttaatttc ttagttgcag atcgagccgt 240

acggtatgat agttagagaa tgtgtgcagt ttgagtttct tattggtgaa cacaataaat 300

atttttcaag acaattattg cttgctccag agta 334

<210> 191
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f11b1

<400> 191

cggacgcgtg ggccgatgac cagtcgtgtg gtgacgctgt ggtaccggcc accagagctg 60

ctgttgggtg ctacggatta tggagtaggt gtcgacttgt ggagtgccgg atgtatcctt 120

gccgagttgc tggctgggaa gcctattatg ccgggacgga ccgaggtaga acaattgcat 180

aaaatattta agctatgcgg atcccccgct gaagaatatt ggaaaaagtc aaagctgcct 240

catgcaacca tatttaagcc ccagcagccg tacaaaaggc gaatagcaga gacattcaaa 300

gatttcccgc aatcagcact tcggctgatt gaaacactcc tatcaattga tcccgccgat 360

cgtttaacag caactgatgc attaaatagt gatttcttta aaacggaacc tcgtgcttgc 420

gatccatcaa gtctgccaca atacccacca agcaaagaga tggatgcaaa a 471

<210> 192
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004f12b1

<400> 192

ctctcgcctc cgattactgc aaagctgcga cggacgccgg gaacctcgac gcatgctacc 60

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cggcggcggc ggtcggtggc caccgggagg cgctctactc gctggccgtc atccaattca 180

acggcagtgg tggcagtaag gacgaccgcg acctccgagc gggcgctgcg ctgtgcgcgc 240

gcgcggtgtc gctcggacac gtagacgccc tccgcgagct cggccactgc cttcaggacg 300

gctacggcgt gcgccgctcc ttgctcgacg ggcgccgtct cctcatccag gcgaacgcgc 360

gggagctc 368

<210> 193
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g01b1

<400> 193

ccctcgcgtc cgcccacgcg tccgggaaga tgttttgata cagtgttgta agagtctgtc 60

cctgcttcct tgtgacacta ttatattctt gtctttatgt tattccgctg cagtactact 120

ctatcactag atgcaaaaat tagctggatg tatggaattt ggggaggcag cccaaacaca 180

agacatttat ctttagctgt gctattctcc ataagatgcg gtgtcttttg catttaactt 240

gtgattgccc ttttggttgt cgaatgcagc tgaaccttac tatctatgca attatgtcaa 300

acattacagt ttacagcttc tctgtatgcc ttcctgttgt ttgtactttg ttctggagcg 360

ttttattgta ccagcctgca agctaaagtg aaaggagtaa cacttggt 408

<210> 194
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g02b1

<400> 194

tggttgaatg ctgcttcttc tcttgtcagg tggctgtccg agatggaaac aaagggttcc 60

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ctgctaaacc atttacggtt ctacatccct caaatactcc ccaatctgga gaaggtggtt 180

tttcttgatg atgatgttgt ggtgcaaaag gacttgacac agctttttc catagaattg 240

catggcaatg ttataggagc agtggagact tgtttagagt catttcatcg gtatcacaaa 300

tatcttaatt tctcgcaacc aataatcagc tcaaagattg atccacatac ttgtgggtgg 360

gcttttggaa tgaacatatt tgacctaatt gcttggagga aagcaaatgc aacatcgctc 420

tatcattatt ggcaggagca aaatgctgat caactgcttt ggagaac 467

<210> 195
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g03b1

<400> 195

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ctcattgaag tgaggagagt acaacttgca tataaacttt ttgatgaggt tgctgctgac 180

atgttcaagg agcatgccaa gaagttggtt caagaaaaca tttcatctgc tttatccata 240

ttgaagtcca ataccagtgc agggaacatt cccacagagg tcattagtga ggtgaatagt 300

atccttgcat tcaataagtt gctaacagtt ctaagcaagt ttcctcaagg cgaccgattt 360

gcacgtgggc taggacctat ctcgttagct ggagattttg atcatgataa aatggttggt 420

gatctaaaga tactctatgc ggcctataca acagaagtac tttcagatgg acgtcttgat 480

gatgagaag 489

<210> 196
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g04b1

<400> 196

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aacctactat gtctcaacct accgttactt acacgatcgg gatgtatgta gtaaaaacgc 120

gccaaatatt ttcccaggga catacgtggt tgatatacaa ttgatattac agacgtttat 180

ttaaagttg 189

<210> 197
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g05b1

<400> 197

ctcctagttc caggcctggc cccgtgtcgc cgggccgccg gtcatcatga accccatcag 60

ccgccagaac ttcatggtca agaacccctg aatgggcgcc gcggcggcgc aagctcgacc 120

agggttatgc tcccaccatg cagacaaaga ttcctttgta gggttttgaa ctagttccta 180

ataaaaggga ctttaaaggg cgggtatact attttgtttt acgaatttca gtttccggga 240

gcaactttgg ggggctttac cgatcgctcg ctcgcctttc gatgaactat gttcctcggt 300

gaaatttccc acgaggcagg aaaataactg catt 334

<210> 198
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g08b1

<400> 198

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tgcgcgggcg tcggtggccg gctacgccag ccgctgcggc tactccacgg cctcgagctc 120

ccagaggttg gctggaaagg tggccgtgat taccggcggg gccagcggca tcggcaaggc 180

gacggcggag gagttcgtca ggaacggcgc caaggtcgtc ctcgccgacg tccaggacga 240

cctgggccgc gccgtggcgg ccgagctcgg gccggacgcg gcatgctaca cgcactgcga 300

cgtgaccgag gaggcgcagg tcgccgcggc ggtggacctc gccgtggccc gccacggcaa 360

gctggacatc atgctcaaca acgccggcat cgtgggctcc ctggcgcgtc cccggctgag 420

cgatct 426

<210> 199
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g09b1

<400> 199

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ctcttcgtgc tcgtctgctg cctcctcgtc ggctctgtcc cggcgcgcct ccccgtcgag 180

cttccgacgc aggtggtacc cgaagccgtt gacctcctgg ccaccgccga gccgcttctg 240

gccaagcagt tggcggctgc cgaggcggcc aacccgacca aagtccactc catgataaca 300

gaggaggagg agaatggtgg ttcacccggc ccgccagcgc ccccagatca tccggtgcgg 360

cggcggagac gacgtggcgg tctccgacga gt 392

<210> 200
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004g10b1

<400> 200

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tgtagatgcc atggataaga acaagaacac cccactgcat tacgctgctg gctatggccg 120

gaaagagtgt gtggatcttc tgttgaagca cggtgctgct gtcactctcc aaaacatgga 180

tgggaagacg cccatcgacg tcgccaagct caacaaccag gacgaggtcc tcaagctgct 240

cgagaaggac gtgttcctgt aaatcacttc acttggcccc catgaagaga catcatgttt 300

tacatccctt ggcattggtt ttatatagtc atacacgaat cggcatttta ttcgttgtgt 360

aagaatctac tgttagctag cctgcaggcc gactggctga ggttagaact gcatgttact 420

gtatatggag acctgtgtat cgtccacttt gtttctggtg attccactag agt 473

<210> 201
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189004g12b1

<400> 201

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aagtacaaga gctacttgga tgctttccag cagatcctga agaaggaggg tgccaagtcc 120

ctcttcaagg gggct 135

<210> 202
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189004h02b1

<400> 202

cccacgcgtc cgcccaaatc ccccacccga accctcggaa tccctctctc gccgccgctg 60

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cgatcttctc gccggagggc cggctgtacc aggtggagta cgcgatggag gcgatcggga 180

tcatgtccga cgccaacatc ctcatcaaca ccgcccgcct ccacgcccag cgctacgcgc 240

tctcctacca ggagcccatc cccgtcgagc agctcgtcca gtccctctgc gacaccaagc 300

agggctacac ccagttcggg ggcctccgcc ccttcggcgt ctccttcctc ttcgcggggt 360

gggacaagaa ccacggcttc cagctctaca tgagcgaccc ctcgggcaac ta 412

<210> 203
<211> 425
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h04b1

<400> 203

ccctctcgtc cgagctctcg aggccgacaa ggagttcata aagcagtgcg tgtggtcctt 60

gaacaaagga ggcaagggtt ttgttcttct tcaggagatc ttgcagcatc ttcgggacct 120

cagaaggatc gagcagcgtg cacggaacaa ctctggagaa gtctcgcccc actacgtgca 180

tccttacacg gattgaagat aagcgccgcc gagccccgcg atcgtgctcg tcagcgccac 240

cgcatcattc aagatgaaga caccaacact ctgaaaaagg aaagtttgcg caccaccaac 300

agcaacaaca acagcgagtg aagagagagg agtttgccga ctagctagcg gcatagtcag 360

gccagaagct gggaagctgg gctctgtcat cccgggagga gaaggagctc ccccttgggt 420

aggtc 425

<210> 204
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h06b1

<400> 204

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gcctcacttt tgaccagctt gcactccgtg ctccaactgg ggagaacact atcctgttga 180

ggggacccaa gaatgcccgt gaggcggtga ggcacttcgg caaagcacct ggtgtgccgc 240

acagccatac caagccctat gtgcgctcca agggtaggaa gtttgagaag gctcgtggta 300

ggaggaacag ccgtggcttc aaggtttaag tcgccctttc ttgttagtcg ctgtttgcgt 360

ggagcggctg ttgttctgtt tgagcaattg acagtaatta gtaaagtact ttgtactgag 420

agtagcaaaa tctatcgccc cagtgtttga atgatatttt gcaggattct 470

<210> 205
<211> 103
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h07b1

<400> 205

aattttatta aaaaaaaaaa aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaataaaa aaaaaaaaaa aaaaaggggc ggc 103

<210> 206
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h08b1

<400> 206

caccttcctc ccctcgccac cacccaccaa ggaaaggagg atgtcttgct gcggcggcaa 60

ctgcggatgc ggcgccggct gcaagtgcgg caacggctgc ggcgggtgca agatgttccc 120

cgacgttgag gccaccgccg gcgccgccgt catggtcatg cccaccgcct cccacaaggg 180

gagctccggc gggttcgaga cggccggcgg ggagaccggc ggctgcgact gcaccacctg 240

caagtgcggc acggcctgcg gctgctcctg ctgcagctgc aactgagccg gcgcccagga 300

ggccggccgg cgaggcgagc acgaggatga ggaggacaac tggacaagca accaccacca 360

ccaccaccac catcactagc cgctgcatgc gcccgcccgc gcgcgcgctg aataaaataa 420

aa 422

<210> 207
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h09b1

<400> 207

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gaggagtatc gacattggac caacaaacat gacatccgta ttggagcgag attggaatgg 180

agctccgctt taagattttt ccggtgaatg aatgaaacaa acatggctga tctgaccagc 240

ccctagttgt aaagtgctac caaatatatg gtttcggttg tccgtcttct agagaggttt 300

taatgttcta gtggagttat accgtgtttg gagcacggcg tggttgtaat tgttttcgcg 360

ttttacccag tttcccctaa ctagtcggtg atcttgcgga agcaagacga gaaataatca 420

ctgcaaattt tctgccccat gcttgctatc ccttcccttg ggtttataca aagacaattc 480

tcgtc 485

<210> 208
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h10b1

<400> 208

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tcccgccgga ggaggtccgg cggagccgct tttacgacgc catggccgcc ggcggcggca 180

agtgaacgta ctactcgatc gtacgcagga gtgtaacacg tagtagtcca gtagcatttt 240

gtttagtttc gtcggtgtgt cgattattgt ttgtgattgt ggcaccaaga aaatgcaagc 300

gcgtgtacat acatatgtgt accctgggtt tttacctaaa aagaaagaaa aactcacagt 360

ttctaagtag ctgcctgtaa aaactgaaac cttcttgaga tgaactcctt gattt 415

<210> 209
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h11b1

<400> 209

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ggcctccccg tcagccgccg ctccaacggg cgctagcctc ggcagcgtca gcaacggtgg 180

aaggatcagg tgcatgcagg tgtggcccat cgagggcatc aagaagttcg agaccctgtc 240

ctacctgcca ccgctcagca cggaggccct cctcaagcag gtcgactacc tgatccgctc 300

caaatgggtg ccttgcctcg agttcagcaa ggttgggttc atcttccgtg agcacaacgc 360

atcccctggg tactacgatg gccggtactg gacaatgtgg aagctgccta tgttcgggtg 420

caccgacgcc acacaggtga tc 442

<210> 210
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189004h12b1

<400> 210

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aaccagcaac atgaagtttg caatgaatgg ttgtattctt attggaactt tggatggtgc 120

gaatgtggag atcagagaag aggttggaga ggagaacttt ttcctctttg gtgcacatgc 180

acctgaaatc gctggtttga ggcaagagag ggctgaagga aagtttgtgc ctgacccgag 240

atttgaagag gttaaggaat acgtccgcag tggcgtcttt gggactagca actatgatga 300

attgatgggt tctttggaag gaaatgaagg ttatggacgt gcagattatt ttcttgttgg 360

caaggatttt cccagttaca ttgaatgcca gcaaaaagtt gatgaagcat accgagatca 420

gaagctatgg acaagaatg 439

<210> 211
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005a04b1

<400> 211

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tccgcgctca ccaacgtgag cctgtctacc ttcgcgccca cggccagggg cgacgtcctg 120

gcgaggccgc aggtggcccc cgcccgcgtc accttcccga cggcgtaccg cggcagcggc 180

gccctctcct gcagggcggg cgggccggcc acgccgccgg gcatctccga caagatgtcg 240

gacagcatca aggaggccca ggagacgtgc tcggaggacg ccgccagcgg ggagtgcgcc 300

gcggcgtggg acgaggtgga ggagctcatc gccgcggcca gccacgcccg ggacaagctc 360

aaggactcgg acccgctcga gaactactgc aaggagaacc ccgagaccga c 411

<210> 212
<211> 291
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005a05b1

<400> 212

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aagaaggact acagcttcga cgtggagaag gacggcgaga ccgcggagct cgacaccaag 120

gtgaactccg cgtcggtcac ctacaccatg aaggacgacg acccgctcgc cgtctacgcc 180

atctccaagt tgctgcagac caaggtgctg ttcaagatcg ccaaggacat ggcccccgcg 240

ccggcgcctg agggccccaa gaagtagaag accaccaaga agaagccctc c 291

<210> 213
<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005a06b1

<400> 213

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag 120

gggggggccgt tttaaagg 138

<210> 214
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005a08b1

<400> 214

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ccggagcaat cagacctttt ggtaaaagag tgaaagggta gcaatcctgc atgagaagat 120

ccctggtatt tttgcccgca aacatcttca tgagtgccag cgaagttatt cactgtttgc 180

catgaaggac acagttacgc agggggggaca atcctttgat atgtatcgct catgttatct 240

gtagctttct aatggattag gtagagcgtg gttggcatct acatcaaaac ttgtcttttg 300

ttcacctcaa gttctagttg gatttcacac cctgttttat acatagataa ataccatttg 360

gttcaaaatg caacttctgc aagtatgcct ttctaatttt tgttttccac ttgatgttga 420

catacgtgga tctgggttac ccttaccttа tgatactata tcatttct 468

<210> 215
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005b01b1

<400> 215

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aaactcccga ggagcttcag aaccatgcta ccgttaagcc ctcagtggtg gaactactac 120

tggaaatatc caaatactgt gatttttatt tgatggaaac tgtacttgat gataagagtg 180

aggagaatgc tcttatggcc ctggagaaag ccgggctttt caataccggt ggcttgatga 240

aagaaaaggt actcttttgc agcagtgaag taggccgaac ttcgtttgtt cgacagttgg 300

agtcagattt ccacatcgac gcaagccttg agataatttc ccaactatc 349

<210> 216
<211> 82
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005b03b1

<400> 216

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atctaatcaa tgggctcacc ta 82

<210> 217
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005b05b1

<400> 217

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cctcagcggc cagggccgcg ccgccagcgc cagccccctg cgcgacatcg ccgccgcggc 180

caacggcaga atcaccatgg gcaacgactt gtggtacggc ccggaccgcg tcaagtacct 240

gggccccttc tccgcgcaga cgccgtccta cctgaacggc gagttccccg gcgactacgg 300

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ggtgatccac gggcggtggg cgatgctcgg cgctcttg 398

<210> 218
<211> 81
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005b06b1

<400> 218

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aaaaaaaaaa aataaaccaa g 81

<210> 219
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005b07b1

<400> 219

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ggtggtgcac ccttaagtac tgaaattgaa gagttcatga gagtgaccag ctgtgcatac 180

tttatccaag gctatggttt aacagaaaca ttgggaccta gcacagtcgg ttaccctgat 240

gatatgtccc tggttggaac tgccggtgtt gccgccacct tcactgaact gcgactggaa 300

gaagtacctg agatgggtta tgatccactt ggtgttcctt ctcgtggtga aattctcatt 360

agagggtcta ctgtcttcac tgggtactac aaaaatcctg agctcacaaa tg 412

<210> 220

<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005b08b1

<400> 220

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caaaaaaaca aaacagacaa aaacaaaaaa aaaaaaaaaa aaaaataaag 110

<210> 221
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005b09b1

<400> 221

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tggattctca tcccagggtc atgaggcttc tgaccttgga ttggaagctg ggcactgcaa 180

ggtatttatg gaatcggagg atgttggtcg caccatcgac ttgtctgtct ttgggtcata 240

cgacgagttg tatggccgtc tggctgacat gtttgggatc gagaaggaag aaatcataag 300

ccatcttcgt taccgtgaca cagctggtgc cgtcatgcac actgggggat taccattcag 360

cgacttcatg aaagtggcac ggaggctgac gataataagt ggcgaaaagg gagggctggc 420

gaaacctctc atcgaatgca t 441

<210> 222
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c01b1

<400> 222

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tgcagaatcc cgcgaaccat cgagtctttg aacgcaagtt gcgcccgagg ccactcggcc 120

gagggcacgc ctgcctgggc gtcacgcc 148

<210> 223
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c02b1

<400> 223

gctcgttcca tggaagctag tcaggctaaa tacatctcca tacttaacat cattcaagga 60

gaggtggacc caacacaggt ccatgagagc ctacaaagga tacgtgaaag gaagcttgtt 120

aacttcgtag agtggggacc tgcaagcatt caggttgcat tgtcaagaaa atcaccatat 180

gttcaaacca cccacagggt tagtggtttg atgttagcaa atcatactag catccgtcac 240

ttattcagca aatgtctggg gcagtatgaa aagctgagga aaaagcaagc ctttcttgac 300

aactacagga agttcccgat gtttgcggac aatgatctct ctgaatttga tgaatctcga 360

gaaattatag agggtctggt tgatgaatac aaggcttgcg aatcacctga ctaca 415

<210> 224
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c03b1

<400> 224

caaatttatt tgaaatttct ctgcaactaa catctaccag gtcatcaaat ttacagctac 60

tgtagctttt gtgaaaaa 78

<210> 225
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c04b1

<400> 225

cccacgcttc cgcggaaatg tcaagaccga atcaggaagc tctaccaagt tgcctgaccc 60

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gtttttggca gtaaaaagac gaagtgacga gtggtagtct cgagtgtctg acccatgtat 180

acatgtagca tggattatta agctgtaata tgtatagtcg attaaatgag ccgcgaggca 240

gaattttctt ggctaaaaaa aaaaaaacta a 271

<210> 226
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c05b1

<400> 226

cagctgttgc tgctcctgct gcagctgcta gatccatcat cgatcatgca tgcaccgtgc 60

cgtgcgtgca tcatcgatcg tatcgatcta ctactaccat accatgtaac cgcaacctga 120

tcgagggcct ttatgtacgc acctgacctg catcagcagt caggtgccat gccatgattg 180

taaacaggcc cccctaaata aaacctccct tgattaacta tacatgtgtc gtctgtggta 240

tgcatatatc atcaccttct ttttcttctt caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaaa aaaaataa 328

<210> 227
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c08b1

<400> 227

cccacgcttc ctaaactgct ctttcttctc gagacgtaag accggtaatc aagagggtga 60

ggcaggaagt actgcagggc tgcaaactgg ttttcagtcg agtgttcccg tccgattgcc 120

ggccgcagca tcagataatg tggaagatgg ccgagcagct gggcgccgct tgctgctcgg 180

aggtggatcc cagcgttacg catgtggtcg ccgtgcatgc cggaacggag aaggcccgct 240

gggctgtcaa acacaagaag tttttgctcc acccccgctg gatcgaggcc tgcaattatc 300

gttggcaccg ccagcgggag gaagatttcc ctgtacctgg cctcaaggag ggcaagggca 360

aggaaaaagt tgcagagaat gcccacctgt aactgagtat aactgactca tctagtgttc 420

gtgtactacc atgattgaag atgaatagat tgaaagtttt ttgt 464

<210> 228

<211> 105
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005d01b1

<400> 228

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cgccactttt gtcattgtgt tgtgaaggcc ttatctgatt ctagt 105

<210> 229
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005d02b1

<400> 229

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gtgttgccgc acagcagcag cattctcgcc tccatacaca ggcggatacc acagtgacca 180

tccacacata ataccactgt ccaccacaag ccaaacaaga cactacaacg agatactgac 240

tcctacagct attaggtaat aatagaactc cgggtagctc ttattgttac tgcgtcggga 300

tgggctgcat ctcaggagct gtggcaggcg cagtgtcggc ggccgggttg gcgaaaaccc 360

ttgcaatgcg ctcag 375

<210> 230
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005d03b1

<400> 230

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ttggtggagg aactttagga catccttggg gaaatgcacc tggtgcagca gctaatcgag 120

tggctttaga agcctgtgta caagctcgta acgaagggcg cgatcttgct cgcgaaggta 180

atgaaattat ccgagcagct tgcaaatgga gtcctgaact agccgcagct tgtgaagtat 240

ggaaggcgat caaattcgag ttcgagccgg tagatactat tgataagtag ataaaactaa 300

agataaagaa gagaaggtat aaataaaaaa gaaac 335

<210> 231
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005d05b1

<400> 231

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ctacaaattc aagcatccgc atcgttaact caactgcagc atacacacgc tgattgtatt 120

cctgagctgt ccgtaagcac tgctgggact actgagaatg aaaaaagcat tcagcaagct 180

cctcacagtt cgaaagacgt ccaaagcaag tcccatggtg cttccacaag gagttgcaca 240

aaggttcaca agcaaggtgt tgcacttggt agatcagtgg atctgtcaaa gtttggtgac 300

tatgacgaac tcacagctga gctagacagg atgtttgagt ttgatggtga actgatgtct 360

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gatgatccat gggaggagtt ct 442

<210> 232
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005d06b1

<400> 232

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gcaccagcgg ctgcagctcc cgctcaggca gcagctgcac ctaagaaggc caagaagtga 180

aggtctgata agaagcttta tctttctggt aatatcaagg gttagcctaa ttttggaaca 240

tcagaagttc agaactgttt tctgtgcaat atcttgtttg tgtcagcgtg tcagatacct 300

taaatatcat atcgtgtttg ttcaaaaaaa aaaataa 337

<210> 233

<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005d08b1

<400> 233

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cccagcgatt gtccttgcta aggttgatgc caacgatgag aagaacaagc cgcttgcggg 120

caagtacgag gtccagggct tccctaccct caagatcttc aggaacgggg gaaagaacat 180

ccaggaatac aagggcccca gggaggctga gggaattgtc gagtacttga agaagcaggt 240

tggccctgct tccaaggaga tcaaggcacc tgaagatgcc acttaccttg aagacggcaa 300

gatccacatt gttggtgttt tcactgaatt cagcggcact gagtttacaa acttccttga 360

ggttgctgag aagctgaggt ctgattatga ctctggccac accgtgcatg ccaacca 417

<210> 234
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005e01b1

<400> 234

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cccgactagt cgaaggccac agccatggcc gcccctaccg gcacttccat gctgagcgcc 120

ctgctccagc ttcccctggc cccgttctcg cggaagagct ccgcgccttc ggcggtccac 180

atgaccgccc gccgcgcgcc gacgtccgtg ctggccgcca agggctacaa cgtgcagatc 240

gtggtggacg agaacgaggg ggaggactcc atcttccggc ggttccggcg ggaggtgatg 300

aaggccggcc tgctccagga gatcaagcgc cgccggcggc atgagaacac caaggacaag 360

aagatccgca aggcccgcga ggccggccgc cgcaaccgcc gcaggcgtat gatggatgat 420

cgtaggttcc cagaagatga gggagac 447

<210> 235
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005e02b1

<400> 235

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caagctcgcc gtccggcccg cctccgccgt cgtctcccgc tccacccgca gggctcgcgg 180

ggcggcggtg gtggccaagt acggggagaa gagcgtctac ttcgacctgg acgacatcgc 240

caacacgacg gggcagtggg acctgtacgg cagcgacgcg gcgtcgccct acaacggcct 300

gcagagcaag ttcttcaaca ccttcgccgc gcccttcacc aagcgagggc tgctgctcaa 360

ggtcctgctg ctc 373

<210> 236
<211> 199
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005e03b1

<400> 236

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cctgtcttac ttgccacccc tctccagtga ggccctccta aagcaggtcg actacctgat 180

ccgatccaag tgggtgccc 199

<210> 237
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005e04b1

<400> 237

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<210> 238
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005e06b1

<400> 238

ggatcattaa ggggtcagat gcagtgggcc tcgctccgag ggccgccgag aagagtaaga 60

accagaagta gcaagaacga tgaacccgat ctgtttcctt tcctgcgatc gcatcttaca 120

agggtgatgg actttatgtg tgatgagaaa gggatttact tatatatata acctacgtgt 180

attctctttg ttatttcctt gtatgttcgt tcggaacaag catgttagat tgtgtaagct 240

gatgtgtgtg tatctactac tactgcacta ctttgatttg attcgcgtgt gttgtatgcg 300

gtttccgttg taaattggtg tgctctgtct gtaccgcaaa ctcttttctt tcatct 356

<210> 239
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005e08b1

<400> 239

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caccgcctcc aggaaggccg gcggcaccac ctccggcaag aagcccgcgg ccggcagcga 120

gggcggcggc gggttcaacc tcggcggcct cttcgccaag aaaggctgaa ctacataagc 180

acgtgcgcgc gcttgggtgc gtgcttcgat ctcatagctc gatttattgc tgtaactcca 240

tggaaaacat cgcagagatc tgcatatatg tacacgcggt gtaactactc aaatgattct 300

tgctgtgatg ccttatagat ttgtattctt cttcacacaa cttctggagt aatttctctc 360

aaaggctcag tatgtcatat acccatgtta agctttgctt tgctaagatc ccaataccga 420

caacctttat atctct 436

<210> 240
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005f01b1

<400> 240

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ggttcgcgta cgtgtgggtg ggcaacccgg cgacgcagtg cgccgggcag tgtgcgtggc 180

cgttccacca gccgcagtac ggcccgcaga tggcaccccc cgcgccgccc aacggcgacg 240

tcggcgtcga cggcatggtg gtgtccctcg cgtccatggt cgtcggcacc gtcaccaacc 300

ccttcggcaa cggc 314

<210> 241
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005f04b1

<400> 241

gttccgtgag tgcgagctca tccacggccg ctgggccatg ctcgccaccc tcggcgccct 60

caccgtcgag tggctcaccg gcgtcacctg gcaggacgcc ggcaaggtgg agctggtgga 120

cgggtcgtcg tacctggggc agccgctgcc gttcacgctc accacgttga tctggatcga 180

ggtgctggtg atcgggtaca tcgagttcca gcgcaacgcg gagctggacc cggagaggag 240

gctctacccc ggtggctcct acttcgaccc gctgggactc gcggcggacc cggtgaagaa 300

ggagactctg cagctggcgg agatcaagca cgcccgcctc gccatggtcg ccttcctcgg 360

cttcgccgtg caggccgccg ccaccggcaa ggggccactc aacaactggg ccaccca 417

<210> 242
<211> 106
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005f05b1

<400> 242

ggtcgttgta gcggtgaaaa aataaagtga catgcagtat catgtaagaa cccgaactat 60

actagttcaa acatgggaat aaaagacaaa cacatgtctt gtctac 106

<210> 243
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005f06b1

<400> 243

ccctctcttc cgcaaaacaa tccaatccaa tcccccaaga gagagaagag gaggaagatg 60

tcgggccgcg gcaagggagg caaggggctc ggcaagggcg gcgcgaagcg ccaccggaag 120

gtgctccgcg acaacatcca gggcatcacc aagccggcga tccggcggct ggcgcgcaag 180

ggcggcgtga agcgcatcta ggggctcatc tacgaggaga cccgcggcgt gctcaagatc 240

ttcctcgaga acgtcatccg cgacgccgtg acctacaccg agcacgcccg ccgcaagacc 300

gtcaccgtca tggacgtcgt ctacgcgctc aagcgcctgt gccgcaccct cta 353

<210> 244
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005f07b1

<400> 244

tcccactcca cacagagacc tccctgctct cgtctttatc tcctgtcaca cacagagaag 60

agaacgaacg agaaaaatgc cgcgccacct gctgcagcag tccgtcgacc gcctcgccgc 120

gctggccgcg cctcc 135

<210> 245
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005f08b1

<400> 245

gtccatgttc actccccccc cctcccaagt atgatggact tggggtgctc aacattgata 60

aatttgcgca aaaaaaaaaa aaaaaaaata aaaacaaaaa aaaaatacaa acaaacaaa 119

<210> 246
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005f09b1

<400> 246

ttcgccgtcc tcacccagga ggagttcctg gctaggtacg cgtcgtccta cgacgctgcc 60

ggtgatgata caggcattac gttgcctgtg ggcggcggcg acgccgagct gtggtcgtcc 120

ggcggcgacg atggtagctc cttggaggct ccgcctccca gctgggactg gagatccaag 180

ggcgccgtca caccggtcaa gtcccaaggc gcaggatgcg ctagctgctg ggcgttcgtg 240

acggttgcga cgatcgagac tctgaactgg atcaggacgg ggcagttggt gcccctctcg 300

gagcagcagc tggtggactg tgaccagtac gacggcgggt gtaaccgcgg gtcctatcac 360

agggcttaca attggattgt ggagaatggc ggcctcacca cggcagcgga ttacccgtac 420

ac 422

<210> 247
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g02b1

<400> 247

ccctcgcttc cgcccacgcg tccgcccacg cgtccggtcc tactgtcaca tacacacaca 60

caagtgctag ctagctaatc gatcagccag ccatggcgga ggagaagcac caccaccacc 120

tgttccacca caagaaggag ggcgaggact tccagcccgc cgctgacggc ggcgtcgaca 180

tgtacgggta ctcgaccgag acggtggtga ccgccaccgg caacgagggc gagtacgagc 240

ggatcaccaa ggaggagaag caccacaagc acaaggagca cctcggcgag atgggcgccg 300

ccgccgccgg agccttcgcc ctctacgaga agcacgaggc gaagaaggac ccggagcacg 360

cgcacaagca caagatcgag gagga 385

<210> 248
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g03b1

<400> 248

cttcgctgca cacaaccctc tccaccccca gcaatccatc catccacccc acccccaccc 60

ccctttgccc tcccctaccc ggcggattcc ctccccgagc tcggcaatgg caaacgcttc 120

atcaggagct gggatccatg atgactgcaa gctgaggttc gtggagctca agtccaagag 180

gatgcaccgc ttcataacct acaggctgga gaaccagaag gaggtcattg tggaccaaac 240

tggggagcgt gaggcaacct atgaggactt caccaagacc ctccctgaga acgactgccg 300

attcgcagtg tttgacttcg acttcaccac cccggaggat gtgccaaaga gcaggatctt 360

ctatatcttc tggtcccccg acacggcaaa ggtgaggagc aagatgacgt acgcgagcac 420

caa 423

<210> 249
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g04b1

<400> 249

gctttttggc tcggccaggc cggcgtcgag atcggcacgt ccgtcggcgg ggccgtgcag 60

cacgccgtgc gccagctgcc cgtgcccttc cggggcgccc agatccgtcg tcgcaagctg 120

cacccgcccc cttctgcgga cggggccgtc ggcctcctct cctcggagag ggccgtcgat 180

agatgccctc tcga 194

<210> 250
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g05b1

<400> 250

cccacgcttc cgctcgtcca ctgcgccagt ctccgggagc gcaacctgct cgccgacgtg 60

tccacgctcg tggagcgcca ccgcgcggcg ggggcgcgca agcgcgacct cctccgcctc 120

ctcgcggcgt ccctccgcgc catgggccac gacgccgcgc tctgcctctc ccgctgggac 180

aagtcgtcgt cccaccccgc cggcgagcac gcctacgtgg acgtcctcct ccccgccggc 240

tcggagcgcg gcgaccgcga gcgcgtgctg gtggacgtcg acttcaggtc ccagttcgag 300

gtggcacggc ccaccaaggc ctaccgcgcc gtgctgcagc ggctcccgtc ggcgttcgtc 360

ggcaaggagg accggctgcg cctgctggtg 390

<210> 251
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g06b1

<400> 251

atctgatcag agaacagagc ggagcggata aactcgagtt cgatcatcac caaccatgtc 60

gtgctgcgga ggcaactgcg ggtgcggatc cggctgcaag tgcggcaacg gctgcggagg 120

gtgcaagatg taccctgaca tggacgaggg agtgaacacc gcctcccaga ccctcatcat 180

gggcgtggcc ccctccaagg gcaccccgtc gttcgaggcc gccgtcgaga acggagggtg 240

caagtgcggc cccaactgca cctgcaaccc gtgcacctgc aagtgatcca tgaggcctca 300

atcaaatcag atcaaggaga tggcatggat ggacctgatg aaggagcgag tagtagttat 360

gcatgaatcg caagcgtgtg tttcgtttta aattgccacc cagaataaga cgagatcta 419

<210> 252
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g08b1

<400> 252

aagagatcag atcagatctc atctcagtct cctctgctcg gctcaggtcg ccggcgatgg 60

cgatggcgcc gtccctccgc accaccgtcc tgctcctcct cttcctcctc gccgcctctt 120

ctcaggcgga ggcggcacaa gcggcggagg acggcatccg tgtcctctcc gccgagaaaa 180

ggatcgacct caccggcccc attgtcaagg tcttcctcac cctcaaggtc cagaacgccg 240

ccaccggcgc cgacgcctca cacgtcctca tcgccttcac gcctgccgag gccgaccacc 300

tcgccatcgt caaggccacc c 321

<210> 253
<211> 470
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189005g09b1

<400> 253

gtcatggcgg agcggctcgc gtcctcggcc tccctcctcc ccagcgcggc ctcgccttcc 60

tcgtcgaccc gccgcgccgc cgtcgcctcc gggctccgcc tccgcccgtc gccctcgcgc 120

ttctcacagg ctgcgaggag agtgcgcggt ggcgctggcg ccgccggggt ggtgccacgg 180

ctgcgggtgg tgcgatgcat ggcggcgtcg gaggccgcgc agctcaagag cgcgcgggag 240

gacatcaagg agatcctcaa aaccacctac tgccacccta tcctggtccg tttgggatgg 300

catgattcag gtacatatga caaaaatatc gacgagtggc cgcagagagg cggagccgac 360

ggaagcttaa gatttgatcc tgagttgagt catggagcca atgctggtct tactaatgct 420

ntaaagctta ttcaaccaat caaggacaaa tacccaggta tcacttatgc 470

<210> 254
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005h01b1

<400> 254

cccacgcgtc cgcccacgcg tccgatctgc tcgagcgttc acttgctagc atggccgata 60

tgatagtatt gcgagctagt aagtgtatga tcatttgtga atgcatgaca tatgctgact 120

tttagatatg gtggcaacgg tcatgcgtac atatgtattt gaacaatatc cataaatgga 180

cctatttcca gtt 193

<210> 255
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005h02b1

<400> 255

tcctcgcttc cgcgccgccg tctcctccta ctcttcgccg ctcccgctcc cgccgtcgcg 60

ccaccgccgt cagccatggc acccaagaag gagaaggccc cggcggcgtc gtccaagccg 120

gccaagtccg gcggcggcaa gcagaagaag aagaagtgga gcaagggcaa gcaaaaggag 180

aaggtgaaca acgcggtgct gttcgaccag gccacctacg acaagctgct caccgaggtg 240

cccaagtaca agcagatcac gccctccgtc ctctccgagc gcctcaggat caatgggtct 300

ctggctcgca gggctatcaa ggacctgatg gagaggggac tcatcaggat ggtgtcaatc 360

cactcaagcc agcagatctt caccagggcg acaaacacct gatttatcat tatcat 416

<210> 256
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005h03b1

<400> 256

cctacgcgtc cgctacccgc tgagtttaag catataaata agcggaggag aagaaactta 60

caaggattcc cctagtaacg gcgagcgaac cgggagcagc ccagcttgag aatcgggcgg 120

ctgtgccgtc cgaattgtag tctggagagg cgtcctcagc gacggaccgg gcccaagtcc 180

cctggaaagg ggcgcctggg agggtgagag ccccgtccgg cccggaccct gtcgccccac 240

gaggcgccgt caacgagtcg ggttgtttgg gaatgcagcc cgtgcccaag accgtgtggg 300

cgcagatctt cgtctggctc gtaaaacccg gagcggggat catgatcatg gacccctacg 360

gcgccgtcat cagcgccacc ccc 383

<210> 257
<211> 204
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005h05b1

<400> 257

cccactcttc cgcgcaaatc ttgtactacc tccttcccaa gatataaggt gtgctttgac 60

ttttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaataa aaaagaaatc aaaaagataa 180

aaaaaaaaaa aaaaaaaaaa caaa 204

<210> 258
<211> 321

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005h09b1

<400> 258

acgccaccga ctcctcctcc agcgaggacg agtcggcgcc gccgccgttg gccccgatgc 60

cgacgaccaa ggaggagcgc cggagggagc gcaagaagcg ccgccgcgtc atggaggccg 120

ggaggaggga cgactcgggg ccgccgcagc cgcaggcaac cggggcgcgc acgccctcgg 180

tgcggtaccg cggcgtgcgc cagcgccgct ggggcaagtt cgcctcggag atccgcgacc 240

cgatccaggg ccgccgcctc tggctcggca ccttcgacac cgccgaggag gccgcagcag 300

cctacgacgc cgtcaagatc c 321

<210> 259
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a05b1

<400> 259

caataccatg gcccccgccg tgatggcttc gtcggctacc accgtcgcac ccttccaggg 60

gctcaagtcc acggccggtc tgcccgtcag ccgccgctcc agcggcagcc tcggcagcgt 120

cagcaatggc ggaaggatca ggtgcatgca ggtgtggccg attgagggca tcaagaagtt 180

cgagaccctg tcttacttgc cacccctctc cacggaggcc ctcctgaagc aggtcgacta 240

cctgatccgc tccaagtggg tgccctgcct cgagttcagc aaggttggct tcgtctttcg 300

tgagcacaac agctcccccg ggtactacga cggccgatac tggacaat 348

<210> 260
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a06b1

<400> 260

atcaccatgg gtttaggatc aaagatgtgg cttgctatac aggccagagc atacaatgtg 60

caattttcag ggtgcaggtc tgtatgcctt gccggtactc gaagattgac tgtagtgctg 120

tttgtatgct gtattgtact ccctccgtcc caaaatataa gaacgttttt gacattatgc 180

tagtgtgaaa aacattctta tattttggga tggagggagt attatttttc ctgtataccg 240

gttgatttat tgatcttgca gtgcaaccat catttcgcag gagaatatag catcccttgc 300

tt 302

<210> 261
<211> 58
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a07b1

<400> 261

gcattatatc agtatttgtt gccgagcatg aaataatgct cagttcaatg ttcaattc 58

<210> 262
<211> 80
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a10b1

<400> 262

cagaactccg aagttaagcg attgctgggc atgttttgtt aatataaaaa gatattgagt 60

atacctattt ggtaaagaca 80

<210> 263
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a11b1

<400> 263

aattttcaaa gtatatatgc attaaggagg gtggagtcag gctagatcta tactataata 60

tccttaatgt ctataagtgg agtcctcttt tatgcgggtt tccactttaa gcaatgattt 120

tagaatccga ttcaatagaa aatgagaaaa tatgcaaac 159

<210> 264
<211> 391

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a12b1

<400> 264

ggagagcaga gctgagcaca acccttggac acctcttctt cttcttccat agtaacccaa 60

cccacccttt gcgaagatgt ataacgctcc gtcggggcag gagatgtcct acacggagca 120

cgtgcagaag cgccacgagg agaagggctg catctacgca tgcgtgttca cagcgctgtg 180

ctgcttctgc tgctacgaga catgcgagtg ctgcctcgac tgcctctgct gctgctgcaa 240

ctaaaccgga catggccgcc atggacggag gccgcaaggc gcagaggaga tccaccggcc 300

tccgccgcct ttcataataa gcatatgtgt ctagtgtctt agctcgatga gaactgtatc 360

acaactttgc tataatacta tctgtccttg t 391

<210> 265
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b04b1

<400> 265

ctcactctct tttgcatgtg accacacaac aaataaacca caaccggaaa cgcaccctca 60

tttggtactg tactggatct ggg 83

<210> 266
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b05b1

<400> 266

gggggggtggc ctccagctcc gatgagcccg gcggcctgac cctgcacatc gaggactacc 60

cgtacgccgt cgacgggctc gaggtgtggc acgccatcga cgggtgggtg cgcagctact 120

gcgcccactt ctaccacagc gacaaggagg tggacggcga cgcggagctg caggcgtggt 180

ggcacgacgt gcgcaccgtc ggccacggcg accggcaggg cgaccaggcg tgctggctgg 240

cgctggacac cgtcgaccac ctcgcccaga cgctgtcgac gctcgtctgg atcgcctccg 300

cgctgcacgc ggccgtcaac ttcgggcagt acgccta 337

<210> 267
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b06b1

<400> 267

gcactactca cggtaagaac cacaaccacc acaagtgagt gaccatcgga gcaaggaaag 60

accaggagag atggcaatga ggccgcttgt cgtcctggcc ctggccgtgg cgctcgccgg 120

cgtggcactg ggaggggggcg cggcggaggg ggccggcgag tgcgggaggt cctcccccga 180

ccggatggcc ctgcgcatgg ccccgtgcat ctcggcggcg gacgagccgg actcggcgcc 240

gtcgagcagc tgctgctcgg cggtgcacac catcggcaag agccccagct gcctgtgcgc 300

cgtcatgct 309

<210> 268
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b07b1

<400> 268

gtgccgaaaa atctgacggc gctgggcctg cagctcactc agttagagaa gataatcagg 60

gacaccgaga agagcctgcg cagcagaggg tgcaatcgac tgatggcggg agcatgatca 120

ggtgtactgg ctacctgcgg ctatgttgct ggatcatgac caaaccttgc tcaagagatg 180

tgctgtggac tgtgcccagc cctgcgctag accttatagt tgcctgtatg atttgtgcaa 240

taacggctgg ttgatctgct ggtacactgt aatggttctt ttgctagact gttccgac 298

<210> 269
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b08b1

<400> 269

gcccaccaag ttcgtcgcca agatgaagct cattcagggc taccctggca acgccggctt 60

caagttcggt gtcgggctcg agagccactt caccacgccc aacctcccct acgtcagggg 120

cgccctcgac acgctcgcgc agctcaagct gcccatgtgg atgaccgagg tcgacgtcgt 180

caagggcccc aaccaggtca agttcctcga gcaggtgcta agggaagcct acggccaccc 240

gggcgtgcag ggcatcgtca tgtgggccgc gtggcacccc tacggatgct acgtcatgtg 300

cctcaccgac aacagcttca agaacctacc cgtcggcgac ctcgtcgaca agctcatcgc 360

cgagtggaag acgcacaaga cgtccgccgc caccgacgcg aatggaatgc tcgagctcg 419

<210> 270
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b09b1

<400> 270

ggcgtggtcg gtgggctgtg gctgctgcag ctgctgctcc tgggctgcct gtggaggcgg 60

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aagagcgcgt ccggctccgg cggcgtggga ggggagagat tcctagtgag tgacatatcc 180

gagtggctgg acaagtacag ggtgttcaag gtggaggagc tgcagcgcgg caccgacggt 240

ttcgacgacg cgcacctcat ccagggcagc gtgtacaagg ccaacatcgg cggcgaggtc 300

ttcgctgtga agaagatgaa gtgggatgcc tgcgaggagc tcaagatcct gcagaaggtg 360

aaccacagca acctggtgaa gctggagggg ttctgcatca acacggcgac gggcgact 418

<210> 271
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b10b1

<400> 271

cggacgcgtg ggcgcacaac gtggtgttcg acgaggacgc ggtgccctcc ggcgtggacg 60

tctccaagat ctcccaggag gagtacctca acgcccccgg cgagaccttc tccgtcaccc 120

tcaccgtccc cggcacctac ggcttctact gcgagcccca cgccggggcc ggcatggtcg 180

gcaaggtcac cgtcaactaa taagctgtct tgttgcgaat tgttgcgggt gggttgatcg 240

atcgggcgtg tcatgcatgc atgcatattg attaattgta cgaacgtacg ctatatgtat 300

atgttttcta ctattataag atgagatgag gctcttgctg ata 343

<210> 272
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b11b1

<400> 272

cccacgcgtc cgcgatagcc aatttattgg ctaattcgaa ttcgtctgta caattcgtaa 60

aattctttct tatttcttat tgttgaaatc caaaattaaa gtctcttggc tctcttcacg 120

ctttctcaca aacagattaa aaaatagatt tttatttttg aagtttggat aaaccattgc 180

ttcgtctggt gtctacaata catataactc attatagtac taatttcatt tttaccagat 240

cgaaaaattt tatgttg 257

<210> 273
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b12b1

<400> 273

cccatcttgt ccgttgacgc gtgggcggac gcgtgggaga agaggcacgc atgcgtgaga 60

aagaagcgag agacatggcg gaggagggga aggtgatcgc gatccacagg caggtgcagt 120

ggagcaccaa gatcgaggag gctggcagca gcacgtatct ggtggtgatc gacttcactg 180

caacatggtg cggaccatgc cgcttcattt ctccaatctt agatgagatt gccaagaagc 240

ttccaagtgt tactttcctg aaggtggatg ttgatgaaat gaagtcaatt gccgaggagt 300

tcagtgttga ggccatgccg acgcttgtgc tcatgaaaga aggaaaggtg gtggacaagg 360

ttgtgg 366

<210> 274
<211> 217

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c04b1

<400> 274

gtctttgaac cgctggactg tgaaccgtcc ctatggtgga gtgctctctg gaactgcagt 60

gagggaaagg atcatccgcg ccttcttggt ggaggagcat aagatcgtga agaaggtgtt 120

gaaaatacag aagaccacgg acaagacgac ctgaatgtaa tctgatcgaa acagaagtgc 180

gaagtgagat ggtgttctgt aaacaaggaa aatattt 217

<210> 275
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c06b1

<400> 275

gtatcctcaa aatcttggag tgctccggta ctctgtctgc aaataccact tcaaaagtgg 60

taaaaaattc aagaaaaatg gaagacagag acacaacatg tgtcaactat gtcatgtgtt 120

gaaatccaaa ttccaatctc aaatctagaa ac 152

<210> 276
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c07b1

<400> 276

cggacgcgtg ggcggacgcg tgggagtctc ccctccctct cccaaatcga agcgagaaat 60

tccccaaaaa gctaccccat ttccgtccca gccgaggcac cggcgccgca gccgcgcccg 120

cgcccgcgcg atgccgaacg cgatcccggc cttcttccgc gcctcgccgg ccgcggcgtc 180

gggctccggc gccggggcgg ggcccagcct cgccacctcc gtctacgaga cccgcctcgg 240

cctggcggcg ctctcctggt cgcgcgccgc gttcggcctc agcctccggg ccgtgctccg 300

cgtcggggcg ctcgcctcct cctcctcggc ctccgactac ggctgctacg acgacggccc 360

ggagttcgac gaggagacca ccat 384

<210> 277
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c10b1

<400> 277

agaactgaag gctagaagag cccaaagatt tcttggagac tcttctccaa tccccctttc 60

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cacgctctcc tccacccaag ggccaggaag atatctccga ggtacccaga tggggccttc 180

tccatggcga agccattctt gcggcgcgag ctcccggaga ggggcggcac cttggcgcgg 240

agaatggcgg gcgggcggcg ccttggcgtg gccggggccg ggaaaggccc cttctttggc 300

ggcgggcggc ggcaggggg gaccggccgc ggccgggtcg tggcgaacct cgccttcgtc 360

gccctcgtgg cctacctcgt ggtgag 386

<210> 278
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c11b1

<400> 278

cctcgttgtg attaagactg caaattatga ggtcaggaag tatacaccat cttcagcagc 60

tgaagcaaaa ggtgaaaaac taacaggatc atcaggtcat aacactgtta ctgggtctat 120

atttggcacg aatgcttcat ctgagaagac tgcactgact acacctgtat tgactcaggc 180

ttctgatgac gaactctaag acgcatccat acagatagct ctgccaatga acaaagactt 240

gaacagttta ccagctccaa atacagaagc ggttaccttg cgaaaggctg aaggaggca 299

<210> 279
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c12b1

<400> 279

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gaaactagct agtttttgtt gtagagaaac ttagctagtt aacgccgtgg acgacgaata 120

tggtgggtag cgctagggtg ctgctcgtag ccgccgtggt agggtttttg gcaaccacgg 180

cgtgcgaagc cgtccagtcg gactacgcca ccgcgctcac caagtc 226

<210> 280
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d05b1

<400> 280

tgatcttcca ttgcctgggt caggctatga aaaggcacag aacgctcggc ggttcatgat 60

ctatgttcac tccaagatga tgatagttga cgacgagtac atcatcgtcg gatcagccaa 120

catcaaccag cggtcgatgg acgggggggag ggactcggag attgccatgg gcgcattcca 180

accacaccac ctgaacacca aagggcaggt tgccagaggg caggtccatg gcttccggat 240

gtcgctgtgg tatgagcacc tcggcatgct gcacaacgac ttcctcaacc cgggaagccg 300

ggagtgcgtc cagagggtga acacgatggc tgacaagtac tgggacctct atgccagcg 359

<210> 281
<211> 104
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d06b1

<400> 281

cacaaacatg tgcacaactg gtacttgtaa taatggatga tgccaataag attgtgaacc 60

ttaattcatc aggagtgtga ctgaatttgc aagtctgctt catc 104

<210> 282
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d07b1

<400> 282

gtcagtctgg actacccgct gagtttaagc atataagtaa ccaggaggtg gaagc 55

<210> 283
<211> 145
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d08b1

<400> 283

cttgtagtgg ttatcatttg ttcaatacta ttggtactga aatggtattt gcatgtgtgt 60

ctgcgcaaat agagaatagt gatgaaccct ttaggttatt cagtgtacaa ggggattcga 120

gcttctatgt gattatattg taata 145

<210> 284
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d09b1

<400> 284

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ctagtgtttg cctcgattct tctggcaaac acaataagtt cgctataaca aagtcgtcaa 180

ctggtcgcaa aattgatgac ccagagttgt tagaagcagt aagactgaca attataaaca 240

acatgcttga gtatcatcct gaagctagca gtcaattggc catgggtgca acttttgggc 300

tagagccccc tacagaagtg gttgatgtgg acatagcaac tcacatagag atctatgacg 360

atggtcctga aagaagttta cttgttgtgg aatcagctga ccgtccaggg ttgttggttg 420

atctagttaa gatcattgct gacatcaata tcactgtcca atctggagaa tttgacactg 480

<210> 285
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007d10b1

<400> 285

cgcccttccc ctctcttcct tcctcccccg tcgtcggctc cagcttaggg tttctcgccc 60

ccgccctccc gcctcaccgc cggccccgta cgccatgtcg aagcaaggag ggaaggccaa 120

gccgctcaag caggccaagg tcgccgagaa ggactacgac gagaatgacc tggcatacct 180

ccagaagaag aaggatgagc aaaaggccct gaaggagctg aaggccaagg caggccagaa 240

gggtgcgctg ggaggatctg gtctcaagaa gagtgggaag aaatgagtct gcccaccctt 300

acgtaatgcc cagaaaatga taatctatct atctacctat ctgtgtcgcg cttcactatc 360

tgtggctgta aaagactacc ttcagctgtg ttgagcatta agcattgtcg cagt 414

<210> 286
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189007d12b1

<400> 286

cgacctcaga gctggaggcg aagctcgacg agggccgccg ccgcgtggag gcagagctcg 60

tggaggcgct cgcgagcctc gaggggcaga aggaggaggc catcaaggcg ctggacgcgc 120

agatcgtgtc gctcagcgac gagatcgtca agaaggtgct cccatccgcg tgaaaactag 180

tagatcacgc agcgcgcagc agccggcgca atcccccgtt tcatagtaaa gatttctagt 240

tcttgatgtg taatgtatac gcccactggg ctgcctcccc taagaatgta actgaatcaa 300

acattctgtg atcgggtata aatgaatgat ccttttgtac 340

<210> 287
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189007e05b1

<400> 287

cagattgtga cacgggacaa cccgtcccca agggcctact tccgatgcgc cttcgcaccg 60

tcctgccgtg tcaagaagaa ggtccagaga agcgcggagg acagctcggt ggtggaggcg 120

acgtacgagg gcgagcacaa ccacccgcac cccacgcggg ccggcgagct gccgagctgc 180

gccacgcagg gcggcggctc ggtgccgtgc tccatctcca tcaactcctc cggtccgacc 240

atcacgctgg acctcaccaa gaacggggga ggcgtgcagg tcgtcgatgc cggggaggcg 300

caaccggaca tgaagaaggt gtgtcgggag gtcgcgtcgc caga 344

<210> 288
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e06b1

<400> 288

gcggttaaga ggaaggagag cagagatgac tgcgtccgtc tcctacgggc tgcgagcact 60

tccgacgtgg tccagctctg tgtccggtga cgaccactgc tcggcgctgg ccatgtcggt 120

gtcggcgcgg gggccccggt ggacgcggcc ccttcggacg ccggcgagga tgggcaatgt 180

aaacgagggc aagggcatct tcgcgccccc ggtggtggtg gtgcgcaaca tcgtcggacg 240

caagcgcttc aaccagctca ggggcaaggc catcgcgctg cactcccagg tgattaccga 300

gttctgtaag accatcggcg ctgaccccaa gcagaggcag ggcttgatcc gcctcgccaa 360

gaagaacgga gagaagctcg gatt 384

<210> 289
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e07b1

<400> 289

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ccctgcggcg cccatggcgg catcccgcgt cgcgctcccg ctgtcgtcga cggccgccag 180

gggcatgagg ctccgcgcgc aggcgacgta caaggtgaag ctgatcacgc cggagggcga 240

ggtggacctc gaggtccccg acgacgtcta catcctcgac cacgccgagg aggaagggat 300

cgacctgccc tactcctgcc gcgccggctc ctgct 335

<210> 290
<211> 417

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e08b1

<400> 290

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gcccagatcc tctccaggtt ccaaaggccc ccaggtgcat tgccatcatc tatgctagga 120

tatgaggcga tgacaggttc cttggatgat tttggatttg aagattacct taacttgccc 180

caagactctg acagcctccg cataccggac atgcaccacg gaatggaggt tcgccttggc 240

ctgtcgaagg ggcccatctg ccccagtttc aattgattcc acccatgtat tagtcttgtg 300

atacgtcgtg ctccccgtcc agcatctata accagtcact agactgtatc atggatttgt 360

gaaacgcgag aactaaattg gcattgcatc agtttgaaat tccttaactt cgattgg 417

<210> 291
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e09b1

<400> 291

tcgcccactc gtgcgcccac gcgtccgcgg cccatctgag cttgctgtca aggaagctgc 60

ctggggtctt gcccgttacg cggccatctc acaggacaat gggctggtgc cgattgtgga 120

gcctgagatc atgctcgacg gtgagcacgg catcgagagg accttcgagg tcgcacagaa 180

ggtgtgggcg gagaccttct actatatggc ccagaacaac gtcatgtttg agggcatcct 240

cttgaagcca agcatggtga cccctggtgc cgagtgcaag gacagggcca cccctgagga 300

agtagccagc tacaccctca agcttctaca gagaaggatc ccccttccg tccccggcat 360

catgttcttg tctggtggtc agtcggaggt gga 393

<210> 292
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e10b1

<400> 292

gaacttactc ccatagcgga gcggcagtct ccgcattgtg gaatgtttaa taagaggttg 60

agttggagtg ggttcagtgg atgtcgtaat aactaatttt agctttttt 109

<210> 293
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e11b1

<400> 293

ccttatctga aattaggact tcttgcatat cgagtgctct ttctagaccc ccacccccc 60

tccccccctt aatattggct cctaagtttc agttaggtct aggaatctat atttgtggct 120

ccatcataac attgaaggca cagagatgag agcatgctaa ttgaaccata ttggttgtat 180

tgtatgagct ggtcacttat tgaatgacct atgctggcgc tgagttcata tttgacagaa 240

ctggagagga aaaagcagaa catgtggtct gttactag 278

<210> 294
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e12b1

<400> 294

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtc cgcccacgcg tccggcga 88

<210> 295
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f06b1

<400> 295

gggtaataga actatatagt gttgggggg ggggggtcc aaggtttaaa ttttggggca 60

catgaatatt tcagacccca acctaaatta ttagagcaaa atttatcata ttttttacca 120

agaaaatgtt tttagtatga atttaatttg aatctagcta gtccaaattg catatagaaa 180

agtatatttt atttcctatg ggaggtgccg atgaaactat ttatatgtgt atggaatcta 240

tctcaagaaa cttggaactc ttgattatca gctattcttg ctactcctaa gtgtaggctt 300

acaccacata gggcaaattt agcaggtttg aaaagcaatt caca 344

<210> 296
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f07b1

<400> 296

gagatctcac gcaaggagca cgaggaggag gcaagggaag ccgccgccgc cgccgccccg 60

tccctcctcg ccggccggcc gccacaggtt tcaagatgtc aacctgcacg tttgcagctt 120

cctgtgccct cttgggcaat gctcgaacaa ccgatgcccc ccagaaagcg gtcaagagcc 180

gcctgagctt cctcggccga ggcgcgccgc agctgcggag cctgaggtcc tccttccccc 240

ccaagaagct ggtgacatct gcatacaagg ggacgagcac gtacaaggtg aagctggtga 300

ccccggaagg ggacgagcac gagtttgagg cgccggacga cgcctacatc ctggactcgg 360

cggaga 366

<210> 297
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f08b1

<400> 297

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aaaagatcaa tgaagggaag atatttgggc ctgttatctc tgttatccac gacatcgaat 120

ttttaaaaaa agggctaccg catgcccggg tccttgtttg gcagaagaaa aaacataaca 180

aagtggtcat cccagctttc atgaaaacct ttgcttcagc cactgttggg atctgaactt 240

actgatacta ttggcgatgt tcctgggtat ggtcagatgc ctaagctaga aagagatgag 300

ccggctgttg cagcgtatga ttcatcaggc acattagagt cgagctgaac ccaactttca 360

aatgagcata agaaagcgat gattttgtgc atggagtctt gctgccttga tcattggtac 420

ctcggccctc gctatcttca ccccacgaca agtaacaatt acctttttg 468

<210> 298
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f09b1

<400> 298

gttctctcag cccatggagg ccatcaagaa gggcctctcc cgggcgctcg cccactacta 60

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gtgcaccggc gagggtgtgc cgttcgtggc cgcgtcggcg ggatgtgcct tgcaggatca 180

cgggctcctg gatgcgccct tcacgacgag cctcctggat gatctcgtcg tgtactaccc 240

ggcacctgag ggctgccgga gcacggaccc gatgctgctg atgcaggtca ccgagttcgc 300

ctgcggcggg ttcaccctgg gcgtgacgtg gaaccacacg ctagccgacg ccacgggcat 360

cgcgcagttc ctgcaggcag tgggcgagct cacccgcgct gaagttgatg cgtcg 415

<210> 299
<211> 66
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f10b1

<400> 299

cgcgttcgtt agtgtgatca taaattctct tcgaattaca ttcaaatata ttgagatctt 60

cgctag 66

<210> 300
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f12b1

<400> 300

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gtcaaacatt aaggaaatca gctttgtcat gttcgagaag aagagggtgt ttagctgtga 120

atcctgtgcc tcttcagcca tgatcttctt caagcttgtc tcccagatcg tggaggaaac 180

gccatcactt tttgcttttc tgtccgggtt ggaaaaggac gggggttgga cccgttaagt 240

tcctatttga cctgtgcggc ttgtttaaaa gtgggacagg aaaatggaca tacagggtac 300

aagggacagt gaacagttgt cacaa 325

<210> 301
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189007g04b1

<400> 301

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aaccaggcga gacatgcagg gtcccaagta ccgatcacca aaggtggctg gaaagcgggt 120

tggatagtta ggtttattcc ctagctctct ttttctcctg tcatcgtcgt attatccgta 180

tttcagtttg cttagctcta aagactcctc ctatagtggt atcatcggaa tcaccagaaa 240

aagagaaaag agaacctgtg gcaagacaaa ggtagtg 277

<210> 302
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189007g05b1

<400> 302

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gacccgaccc catggccttc atgcgcacct cctccaatgc atcctctggc atgggagttg 180

ctcctgatat cagggagaca ttcctggagc ttcagatgaa gaaggcattt cgctatgtca 240

tcttcaaaat agaagaaaag caaaagcagg ttgttgtgga gaagacgggg gctacaactg 300

agagttatga tgatttcctg gcttgtctcc cagaaaacga ctgcagatat gcccttttatg 360

attttgactc tgttactggg gagaatgtgc agaaaagcaa gattttcttc attgcctggt 420

cccctgacac at 432

<210> 303
<211> 284
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g07b1

<400> 303

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ttttggctgg agattttgaa gtgaatgtgt tctacaagat atctagaact gttttagcta 180

tgcgttaagt tttatggaat gaacatttcg atgtagtggc aagaacgtgc ctgatgcttg 240

tctttgtgaa acctattcct gttcagacat atttggatat gttg 284

<210> 304
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g08b1

<400> 304

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ggatctggca tcactccgat gttccaagtt gcaagggcaa ttctcgagaa ccctaatgac 180

aaaacgaagg ttcatctagt ctatgcaaat gtcacacctg aagacattct tctgaaggaa 240

gagctggaca gcctggccga agaatatcct gaccgcttca agatcttcta cgtgttgaat 300

cagcctcctg aagtctggaa tggtggtgtt ggctttgtgt cccaggacat gattaagact 360

cac 363

<210> 305
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g09b1

<400> 305

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gtccctcccg gtgccgaaac cccactcctt gccctcctcc gccgcggcgg tcaccaccgt 120

gcaggcaaag aagtcgccgc cggccgtggc tgcggctgcg gcggcgaccg tcctgccgac 180

gacggccgag agcacagcgt cgatgatgcc ggcggaggcg ctgtcgctgc acctgccgga 240

gctgccgtcg gcgatgcggg acaagatcct gagcctggag ctgatggggg tggactacgg 300

gcgcgcgctg tcgctgaacc cggcgctccg ggacgcggcg ccggagtcca tccacgcggt 360

ggtgaccttc ctccagtcgc gcgggctcca cttcaaggac ctgggccgcg tcttcggcat 420

gtgcccgt 428

<210> 306
<211> 384
<212> DNA
<213> Triticum aestivum'

<223> Clone ID: uC-tsfl189007g10b1

<400> 306

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ctcgtcggcc acctccgtcg ctcctttcca ggggctcaag tccaccgccg gcctccccgt 120

cagccgccgc tccaacggcg ctagcctcgg cagcgtcagc aacggtggaa ggatcaggtg 180

catgcaggtg tggcccatcg agggcatcaa gaagttcgag accctgtcct acctgccacc 240

gctcagcacg gaggccctcc tcaagcaggt cgactacctg atccgctcca aatgggtgcc 300

ttgcctcgag ttcagcaagg ttgggttcat cttccgtgag cacaacgcat cccctgggta 360

ctacgatggc cggtactgga caat 384

<210> 307
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g11b1

<400> 307

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cattaccctg gggagcccgc cggtgcagcc gtgctgctcg ctgatccagg ggctggcgga 120

cctggaggcg gcgccgtgcc tgtgcacgac gctgaacctc aacctcctgg gcatcaacct 180

gaccttgccc atcgccctca gcctcgtcct caacaactgc ggcaagaacg tcccctccgg 240

cttccagtgc cccaactgag cccggccgga ccttgcatgc tgcatccgcc atacctcatg 300

catgcatgca tgcatgattg gctatttgaa gtaccaccac gtact 345

<210> 308
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g12b1

<400> 308

atctgtccac tcgtgcgccc acgcgtccgg ctcctcctag caagctatat acctacatag 60

tacagccatg gcccgcaccg tgatggccta ggaggccacc tccgtcgctc ctttccaggg 120

gctcaagtcc accgacggcc tgcccgtcag ccgccggttc aacggcgcta gcctcggcag 180

cgtcagcaac ggtggaagga tcaggtgcat gcaggtgtgg cccatcgagg gcatcaagaa 240

gttcgagacc ctgtcctact tgccaccgct cagcacggag gccctcctta agcaggtcga 300

c 301

<210> 309
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h04b1

<400> 309

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cggcaatgga gcatcggggc ctgcttctcg tcctcgtcgc ggcggcgtgc ctctcgggcg 120

gcgcccacgc caggcacgcc aagaagtcgt acggggccgt cttcagcttc ggggattcgc 180

tctccgacgc cggcaacctc atcgtcgacg gcatccccaa gtcgctcacc accgcgcggt 240

cgccctacgg catgaccttc ttcggccgcc ccaccggccg ctgctccaac ggccgcgtcg 300

tcgtcgactt cctcgccgag cact 324

<210> 310
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h06b1

<400> 310

agcgatggtt catgcgcttg aagcaaaacc ttctgaaatg ccttgcgaga aagaagagct 60

gcttaatgcc gctgtccgcc gcgtggatgc actggaagcc gaactcattg taacaaagaa 120

ggccctgcac gaggctctta tcaggcaaga ggaactactt gcttatgtgg acaggaagac 180

aattgccaag gcccagaaaa agaagaagaa gccgatgtct tgctactagg acacaaggag 240

agagagagag agagcccccc ttggttccag ttttcttttc tctgagatgc cggagatggc 300

gtttgagatg atgtaaacgg ttgatccgtt cgttttcctg acaaatgtga aaaggacaga 360

catatgggtt tgtaaatgga cagaaaatcc tgacataaat 400

<210> 311
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h08b1

<400> 311

tcaattaacc tcaaaacaat gaggaaatca aggtgaaggc caagattgaa gcacagaagg 60

tcagagagat tgcagaggag agtgcggggt caaaagctcg gatgaatatt taccttgcac 120

tgacggcgat actcggtctt acaatcgcaa atgccgtctt tgcaacgcca gaggtggaat 180

ggaggaaggt tgctgctctg ggtctaattt tcattggcct ggttgctcag gtaatctatg 240

agcaagatat atccccaccg gtagctgaca aggatgaaaa aagagaagaa tgaaagagct 300

gtgcaccctg agtgaaacat caaaaagcag caagagcttc atcgatatag acgtagactg 360

tataaattca agatatagat tgtgtaatct tagttatcat tt 402

<210> 312
<211> 223
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h09b1

<400> 312

taccaacatg gctcgagaaa gcatgctcgt atgtgaatgc tatcggtggc tatgtatatg 60

cacggacgca taatattata caatatgtca actatatacg ttttaatggt taaaaaaaaa 120

aaaaaaaaaa aaagacaaaa aaaaaataaa aaaaaaaaaa aaaaaaaaaa aaaatacata 180

aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggccgtttt aaa 223

<210> 313
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h11b1

<400> 313

tcgcggttcc ggaggagacc cgaggaagaa ggagaagcgg cgcggcgagg cgcggcgagg 60

agaaagatgg ggaagatgcc ggtgcggatg aaggcggtgg tgtacgcgct gtcgccgttc 120

cagcagcagg tgatgccggg cctgtggaag gacatcacca ccaagatcca ccacaaggtg 180

tccgagaact ggatctccgc cacgctcctc atcacccccg tcgtcggcac ctaccagtac 240

gcgatgtact acaaggagca ggagaagctg tcccacagat actagatgtg aagctttgtc 300

aaatgtcaaa gcagttggaa tttccatgtt ctataatccg ccaagagtga tttaacat 358

<210> 314
<211> 293
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007h12b1

<400> 314

tcccactcgt ccgacccact cggcggcggc ggagcacgcg aagatggtga agttcctgaa 60

gcccggcaag gcggtgatcc ttctccaggg tcggttcgcc ggccggaagg cggtcattgt 120

gcgcgttttc gaggagggca cacgcgaccg cccctacggt cactgcctag tcgccggcct 180

agccaagtac cccaagaagg tgatccgcaa ggactcgtcc aagaagacgg ccaagaagtc 240

gcgcgtgaag tgcttcctga agctggtcaa cttcacccac atgatgccca ccc 293

<210> 315
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008a03b1

<400> 315

gcgcatgcgg aggcggacgt acccgcaacc tcgctcttcg gtgcggaccg ccgcctctgc 60

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ttcctcgcca cgctctcgtc tccctcttct ccggccatcc ctgtcctccc cctgatctca 180

cgcaagtcca ccaattgcag cctgcgcagc ggcttgctga gtgatgtttc atcggtgtat 240

ctgtcctacg ccttttgcaa gaggtcacta atgagagaaa atgatgccaa ggcattcgtc 300

agagtatgga aagtcatgga gatgtgctac aagatcttgg gcgaagggaa gcttgtcacc 360

cagcgggagt tgttctacaa actactatcg gactcaccca agtacttcag ctgtcagcgc 420

catgtcaatc aaacc 435

<210> 316
<211> 134
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008a04b1

<400> 316

cggacgcgtg ggcggacgcg tgggtggtac tggatgatga atgtacctga gttatttgtt 60

tgccagatat ttatccgaat gaggctcaac ctcttaactt ttttgctctg tgggttaaaa 120

gatctctttt atca 134

<210> 317
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008a05b1

<400> 317

tctcagagca aacacaaagt tggcagtaag atctgagtct ggacaatccg caatcagttt 60

catatatctg atggagatga tgaacaagtt tgggatacac aaattaacag gtgatcagga 120

tacatgttac agttggtacg gttaattaca cataaacagc gcaaacggca taatcaccac 180

acgacacgaa ggagaacgaa cgacatggtg agcaacatgg agaaggaaca cggccaacag 240

aaagtacacc tggaactcta agtctccttt tcctttggtt cagggagaga cttcctgaac 300

caggggatca gaacagaggt cctcttctgg tacagcctgt aggcctctgc ccggtgctcc 360

tgcttcagca tgcgccgctc gacgagcacg gtgacgtagc cgaggcacat gct 413

<210> 318
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008a06b1

<400> 318

cccacgcgtc ctcccacgcg tccgcccacg cgtccgagag aagcaaactg gaagcatcta 60

cgagcactgg gatattcttc ctcccaagga aatcaaggac ccagaagcta agaagccaga 120

ggactgggat gacaaggagt acattcccga tcctgaggac gtcaagccag agggctacga 180

tgacattccc aaggaagtca ccgatcctga tgctaagaag cctgaggatt gggatgatga 240

ggaagatggt gaatggactg ccccaaccat ccccaaccca gagtacaagg gcccatggaa 300

gcaaaagaaa atcaagaacc ctaactacca gggcaaatgg aaggcaccta tgattgccaa 360

cccagacttc aaggatgatc cttacatcta tgctttcgac agcctgaagt acatcggaat 420

tgagctgtgg caggttaagt caggaacttt gtttgacaac attctcatca ctgacgatgc 480

<210> 319
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008a09b1

<400> 319

ggctcatggc agcgcaaagc gtgtgttagc tgatgtgatg ttacaccgta gaatcatcat 60

cgttcgtgac gataataatg atccgacgag aacctctatt gtcattgttc tgttgtcatt 120

gtgtagttta ctctgtatct gaactcggtt tagtctgcgg aaccgtactg ctatgatgaa 180

tgtgtcgatg taaatcgtgg ctgtcgtgcc tgtctgactg atacattgtt atcgtagtcg 240

ataaatgata tcatctgtgt cgtctcag 268

<210> 320
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008b01b1

<400> 320

gggttctggt gttggtgttt cctttgttgg gtcaaaagga ttatctcaag gtcttttagt 60

tactgtagct atagcagtgc acaacatacc tgaaggcctg gctgtaagca tggtactatc 120

atctaggggt gtctccccac aaaaagcaat gctatggagt atcataacat ctttaccaca 180

gccaattgtt gctgtgcctg cattcctttg tgccgatgca tttcagaagg tgcttccttt 240

ctgtactggt tttgctgcag ggtgcatgat atggattgtt attgcagagg ttcttcctga 300

tgcttttaag gaagcaactc catctcaagt agcctctgct ggaacacttg ctgttgcttt 360

tatggaaaca ttaagtaccg tgcttcaggg attcacggat ggccacggct tggaagatac 420

atcaggcttt ttggtatcac ttgtatttgg tctt 454

<210> 321
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008b02b1

<400> 321

cccacgcgtc ctcgcctcca ccccacccgt cccgaccct ctcctccaag gtaagcccgc 60

ggcggcggcg agcgagcgag cggcggcgat gacgacccgc ttcaagaaga accggaagaa 120

gcgcggccac gtgtccgccg ggcacgggcg tgtgggcaag caccgcaagc atcccggagg 180

ccgcggtaac gccggaggca tgcaccacca ccgcatcctc ttcgacaagt accatcccgg 240

ctacttcggc aaggtcggta tgcgctactt ccacaagctc agcaacaggt tctacacacc 300

gacggtcaac gtcgagaggc tctggtccat ggttccgtcc gacaaggcgg cggaggccgg 360

cggcgacaag gcccccgtgg tcgacgtctc gcagttcggc tacttcaagg tgctcggcaa 420

ggggatgctg ccggagaagc ccatcgtcgt c 451

<210> 322
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008b03b1

<400> 322

ctcctaatac gttgtaaaat gtactacagc aaccaaactt tccagcagaa tgttagcagt 60

gctttgtaac ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaacaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggggcccttt aaaaaaaaaa aaaataaaca 240

cccggtgcat ggaaaaaaaa attttttttt 269

<210> 323
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008b04b1

<400> 323

tttggctaca tccgtctttc tgaaagactt cggaaaacag caagcgcacc cgcaaaggct 60

cctccacggg ctgatgtgat taaaagtctg aaaaatggca ttgtgctcaa tattcttggg 120

atgggcgcag ctgttctcgg tatgcaggca cttgttggtg ctttggtagc aaaagccctt 180

actacctccg cagtccccta ttatcaggca acttccgccg gccaaagtcc tgttttggct 240

ctagatgtat tcctggttca ggcctcagca aacaccatac tgtcgcattt cctaggtgtg 300

gcgacttccc tggagctgct ccgttccgtg tcaatcgccc cgaccgagcc tgctgcgaca 360

tgagccagga gcccaagagc tgctggattc ctttactttg cacttgtttt ccttttcccc 420

tgactgccta ggaatagcat ctcgtgtgcg ccggtattat gtcttgacat ttcggcttaa 480

atgagc 486

<210> 324
<211> 79
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008b05b1

<400> 324

cccacgcgtc cgctgctact ttcagcgttg ttgagttgta attgatgctg ttttgcgtga 60

acatgggtac cttatggtc 79

<210> 325
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008b06b1

<400> 325

cccactcgtc cgtcgccgcc agcgccacag cctccaaacc ctcgatctcc cgcatcggag 60

ctccctgccc ccaacccccc acccccaccc aaccatggcg gaccgcggcg gcgagcgtgg 120

tggcgaccgc ggaggcgagc gcggcgggtt cggccgcggc ttcgggcgcg gcgggcgcgg 180

ggaccgtggc gggcgccgcg gcggccgtcg tggccctcgc caggaggagg agaagtgggt 240

gcccgtcacc aaactcggcc gcctcgtcaa ggagggccgc ttcaccaaga tggaggagct 300

ctacctccac tcgctaccca tcaaggagca ccagatcgtg gagcagctct gcccggggct 360

caaggacgag gtgatgaaga tcacccccgt gcagaagcag acccgcgccg gccagcggac 420

ccgcttc 427

<210> 326
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008b07b1

<400> 326

cccacgcgtc cgggagctgc agatattcaa caagaggtgg aaggaggcgg tggcggagga 60

catgtgctgg acggacccct acccgcagcc gccgacgccg acgcccaagg gatgacccac 120

ggtgcccgcc gccggcgatg tcctttgcgg ttgagtagat gacatagaag atacatcaaa 180

atttacaggt ctagagagct tcagataaca tgtcatgtac agatctcttt ctccccggtc 240

aataagatag gttcaaagac gatgtaatta tcataatttt cggtaaaaag atggatt 297

<210> 327
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008b08b1

<400> 327

cccacgcgtc ctggaatgtg aggctatttt ggcttgttga tgttgctggt gtgtgttttt 60

ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaataacaa aactaaataa aataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacggg 180

ggc 183

<210> 328
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008b09b1

<400> 328

cgcgcgcgcc ccgccgcggc atcgtcgtgt gcagcgccgc ggcggcggcc gaggcctcgg 60

aggcggagcc cgtggagaag ttccggctcg acaacctgag cccgcagaag ggggcgcggc 120

ggaagccgaa gcggaagggg cgcggtatct cggcggggca gggcgccagc tgcgggttcg 180

gtatgcgcgg ccagaagtcg cgctccgggc ccggcgtccg ccgagggttc gagggcgggc 240

aaatgccgct ctaccgccgt cttccgaagc tccgcggaat cgccggcgga atgcatatcg 300

ggttgccaaa gtacgtgccg ttcaatttga gggacatagt gcagggtggg ttcaaggatg 360

gcgatgagat ttccttggag tccttgaaat cgaggggctt gatcaatcca tccggcaggg 420

aaagaaagct tccactcaag attttgggag atggtgatct atcagtcaaa ttgaacat 478

<210> 329
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c02b1

<400> 329

tgaggaacaa gatccttgcc gcggtgagca ggagggacgc cttcatgctg cgtctcatcg 60

acaacgagcg ccggaggctt gacgatggcg gcgccgaagg cgacaagaag agcatgatcg 120

ccgtgctgct cactctgcag aagacggagc cagaggtgta caccgatacc atgatcatgg 180

ctctctgcgc gaatttattc ggggctggaa cggagaccac gtcgacgacg acggagtggg 240

cgatgtcgct gctgctgaac cacccggcgg cgctgaggaa ggcgcaggac gagatcgacg 300

cggccgtggg gacctcccgg ctggtgaccg ccgacgacgt gccccggctg gcctacctgc 360

agtgcatcgt gagcgagacg ctgcggctgt acccggcggc accgatgctg ctgccgcacc 420

agtcctcggc tgactgcaag gtcggcggct acaacgtgcc gagcggcacg atgctgatgg 480

tgaacgcgta c 491

<210> 330
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c04b1

<400> 330

cccacgcgtc cgcccacgcg tccgctctgc atgctttacc atgcggagct aaaattacgc 60

tgggcgccta ttagtagaat ttggcattgg ttttgtgtcg atgccggggt tcagagctaa 120

aattttattc tcacgccaag actcgtatca agagttgttt tttagaggct gtataccgaa 180

ctactgtcga tcatatcaat atgaatagaa atgatttttt gtttc 225

<210> 331
<211> 260
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c06b1

<400> 331

agaatgtgag accattaaca cggttaaagc taaactgctt gaagtctagg caaaaagagg 60

tactctttct acaactatat tagtattagt accgaattta aacgggaaat agctaatgta 120

aaatttatct gatatagaac actcatatcg ataaaatggt ttgaactatt tactagaaaa 180

aaaaaggggg caccctgccc ttttttaacc aatgccgaat cgacgaccta tgtataaaaa 240

agagaaattt tttggatttg 260

<210> 332
<211> 76
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c07b1

<400> 332

gtagtaaagt aattaatatc atatgtcaac tgtctctgtg tgatctttag catttgctaa 60

ttgattcgat taaaaa 76

<210> 333
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c08b1

<400> 333

ctctgttcga aatctttggg gacgattctg tattacaatt tggtggagga actttaggac 60

atccttgggg aaatgcacct ggtgcagcag ctaatcgagt ggctttagaa gcctgtgtac 120

aagctcgtaa cgaagggcgc gatcttgctc gcgaaggtaa tgaaattatc cgagcagctt 180

gcaaatggag tcctgaacta gccgcagctt gtgaagtatg gaaggcgatc aaattcgagt 240

tcgagccggt agatactatt gataagtaga taaaactaaa gataaagaag agaaggtatt 300

actcc 305

<210> 334
<211> 317
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189008c09b1

<400> 334

gaccgaaatc tttggggacg attctgtatt acaatttggt ggaggaactt taggacatcc 60

ttggggaaat gcacctggtg cagcagctaa tcgagtggct ttagaagcct gtgtacaagc 120

ttcgtaacga agggcgcgat cttgctcgcg aaggtaatga aattatccga gcagcttgca 180

aatggagtcc tgaactagcc gcagcttgtg aagtatggaa ggcgatcaaa ttcgagttcg 240

agccggtaga tactattgat aagtagataa aactaaagat aaagaagaga aggtataaat 300

aaaaaagaaa cgaanna 317

<210> 335
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d01b1

<400> 335

cccattcgtc cgtggacatc ggccgagaag gttccggaag gatgcctcgc gcggggttgt 60

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ccgtcgacgg cttcctcaag atcggcgccg acggcgcctg cagggtggcc gccgaggacg 180

ccttcgactg cctccaaagt gggagtgtct cgaagcacaa gcttgagaag acactggaaa 240

aaatgtgcaa ggagggcgca tattggggtg ctgttgctgg agtgtatgta ggcatggagt 300

atggagtgga aagggtccgc ggagagtatg actggaaaaa tgcgttgatt ggaggcatcg 360

tatgcggcgc cctgatctct gctgctagca acaacaaa 398

<210> 336
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d02b1

<400> 336

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aggcgcccgc ggtggagacg cccgtcgccg ctgaggaggt cgcgaagacg gaggaggtcc 120

ccgcgccggc ggagaccgag gtcgaggcgc ctgctgcccc cgtcgaggtc gtggagacca 180

aggaggaggc accggccgcc gccgagacgg aggatgccaa ggaggccgag ccagcagctg 240

cggccgagcc ggaggccgag gcgcccaaag agacagaggc gccagccgtg gtcgagacag 300

agaccaagga ggccgtggct gaggcagagc cggcggcggc cggggaggtg aaggaagagg 360

cggcgcctgc tgccgaggcc gagccggccg ctcccgctgc tgctgaggaa gcaccggtgg 420

aggcagcc 428

<210> 337
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d03b1

<400> 337

gcaagaagca ctcaggaagc tcctagccaa caccaatcaa agcctccatc caatcccaag 60

caacctcgaa gatgtcttgc tgcggaggaa gctgcggctg cggcagcgcc tgcaagtgcg 120

gcaacggctg cggcggctgc aacatgtacc cggaggtcga ggccgccggc gccaccctcc 180

tcgtctccgc cactgccacc cacaaggcga gctccggcgg gatggagatg gcggcggaga 240

acggcggctg cggctgcacc cagtgcaagt gcggcaccag ctgcggctgc tcctgctgca 300

gctgctagat cattgatcat gcatgcgccg cgtgcatcat atctatgatc tatctaccat 360

ctactaccat gtaacgctgc ctgatcgagg gtctttgtat gtatgtacgc acctgcctgc 420

atgagcagag cgggtgccat gccatgcatg taaaccccta aataaaatct cccgtggtta 480

tgctt 485

<210> 338
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d06b1

<400> 338

agctttccca acaaccattc ccccagcaac cacaccaacc tcaacaacca tatccacaac 60

aacaaccata tgggagtagt cttacaagca tcggtggcca atgaaatgaa cacctgtaat 120

acaagacgga tggatcatcg ttgtttagtc aatgagcgtt caatgtaacg atgataaata 180

aagtgatgtg caccataatg tgtaaccccg acctatacta gttcaaacat gggaataaaa 240

gacaaagaaa gttcttgtca cat 263

<210> 339

<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d08b1

<400> 339

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ggagtgccgg ggacagcaga tcttgtcgga cgaggcgaga gagcacgagg ccatgatcag 180

caaggagcgt cgaggtctgg ctcaccgtcg tcaccaccac gggccacgcc cggcgccgtc 240

gggggcgatc cggggcgtgc ggaggagatt actggcggca gcctagcctg attatgcata 300

ataatgcatg cacgaacatg acatccatga acaaatcgat caagaaccta tgatgctgga 360

aagttaatta caagtaatcg aggggcaaat caaggaaacc aatatgcgta tttgcatgta 420

<210> 340
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d09b1

<400> 340

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gccgctagac cagctcgcca gcagcaatgg cccggatcaa ggtgcacgag ctgaggggga 120

agaacaaggg cggagctgca gggccagctc aaggacctca aggcggagct ctccctcctc 180

cgcgtcgcca aggtcaccgg cggcgccccc aacaagctct ccaagatcaa ggtggtgcgc 240

acctcgattg cgagggtgct cacggtgatc tcgcagaagc agaagtcggc gctgagggag 300

gcgtacaaga acaagcgtct cccgctcgac ctccgcccca agaagacccg cgccatccgc 360

aggcgtctca ccaagcacca gctctctttg aagacggaga gggagaagaa gcgcgagaag 420

tacttcccca tgaggaagta tgctatc 447

<210> 341
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e01b1

<400> 341

gagcgctcat atatcctcga gacctccaga tctgtggtct gttgcagtct ctgcctcctc 60

acaacaacaa gcccctgcag atggacaccg ccatgcaccc cgccgccggc gacgacgacg 120

tcctcgccga cctgctcacc gtcggcaccg gcaccgacac cgagggcatt atttgtggta 180

tgccagactt caagatgggt ggaaagaggg gcgatgaatc tgcccctact gatgctggtg 240

atgaagatgg cgaagatgat gacggggacg aggatggcga cttcgcggag ggcgaagagg 300

aaatctcgga aggagaggag tatgacaacc ccaaggccag tgacgccaag aagaaacaaa 360

taggcgaggg tgaggagaat ggcgaggatg atgaggaaga acaagaggag caggaaggtg 420

gaggaggt 428

<210> 342
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e03b1

<400> 342

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cctctatcta tgcttctgtt gatacttgat cgttgtactt cgtatcagta attggaaaga 120

tgctgcatgc atgatgcatg caattactgt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaataaaa aaaaaaaaaa 240

aaaaaaaaat atagaaaaaa aataaaaaaa aaaaaaaata aaaaaagggg gggccttt 298

<210> 343
<211> 221
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e04b1

<400> 343

ggagtaagca agggaatcca gcattggtta gaataacagg aaggaaatga gtattgtcta 60

ttgtgtgtac aaagtattgt taggtcatgt ccaaggttaa gtctgtctct atgtcgttgt 120

agattctcgt ctacattcat gatctgtgtg ttgttatctg ttcaaatcaa gtcatcaagt 180

aagctgtcat gtaaactcat gtattagtgt tatttgtaaa a 221

<210> 344
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e06b1

<400> 344

gttctaactg aaaatgaagg gtgactacca caggtacctt gcggagttca aggcgggtgc 60

tgagaggaaa ggaaacattg ctggctttgg ctctaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaagggcgca aatgggggggg gttct 225

<210> 345
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e07b1

<400> 345

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gagagcagag atgactgcgt ccgtctccta cgggctgcga gcacttccga cgtggtccag 120

ctctgtgtcc ggtgacgacc actgctcggc gctggccatg tcggtgtcgg cgcgggggcc 180

ccggtggacg cggcccccttc ggacgccggc gaggatgggc aatgtaaacg agggcaaggg 240

catcttcgcg cccctggtgg tggtggtgcg caacatcgtc ggacgcaagc gcttcaacca 300

gctcaggggc aaggccatcg cgctgcactc ccaggtgatt accgagttct gtaagaccat 360

cggcgctgac cccaagcaga ggcagggctt gatccgcctc gccaagaaga acggagagaa 420

gctcggattc cttgcttgac ctgcctcaca atccccctt 459

<210> 346
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e09b1

<400> 346

cacacaccgc acgcgtttga cattttccgc ccaccaccac cggagggagc gagctccagc 60

catggccgcc aagtgctacc cgacggtcag cgacgagtac ctggcggcgg tcgccaaggc 120

caagcgcaag ctccgcggct tcatcgccga gaagaactgc gcgcccctca tgctccgcct 180

cgcgtggcac tcggccggga ccttcgacgt ggccaccaag accggcggcc ccttcggcac 240

catgaagtgc cccgcggagc tcgcgcacgg cgccaacgcc ggcctcgaca tcgccgtcag 300

gctgctcgag cccatcaagg agcagttccc catcctctcc tacgccgact tctaccagct 360

cgctggagtc gtcgccgtcg aggtgaccgg cgggcctgag gtccccttcc acccggtgag 420

acaggacaag cccgagcc 438

<210> 347
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f02b1

<400> 347

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gccaaggcga gcttcgacgt gcggcagccg gacaaagagt tctggaagaa ggtgtgcagg 120

gggttcctca agggcaggct ccagccgcag cagcagaagc agcaacataa gctgcagcta 180

taggagtcgg aggagtcgga gccggcggcg agtccgagaa gaaggccggt gccgccggag 240

gaggaggagg aggaggacat agtagcgtta ctgagctggg ggggttgcga ttgcgagcct 300

agaattaatc cttatttttc tgcttcggag tttgacatcg tcgtcgtcat catcatcatc 360

ttgtacagaa accgcctatt taatcgaagc attaataaag agcgatcggt gct 413

<210> 348
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f03b1

<400> 348

cccacgcgtc cgcccacgcg tccgcccacg cgtccggtgt gtgtactacg tgagcgtgag 60

cagctcggca cggacgtccg tacgcgcgtg ggggtcaccc accggggcac gcaggcagcc 120

gctgacgagg gccaggccgg cacggtggac cagcggcgag cgggcgcgcc actgtgcgtg 180

acacgcgtgc acatgcatgg cgttcgtcgt ggggcgctcc ccaacgggca gaagctgccg 240

tgctgtggat ctgtgttcgt gttggtgttc gtctcgtgat gtgtttgttt ggttgtgttc 300

ggcgcgtggt gtttcttctc ttgtcatgag actcggagcg tgtgtatggc tctgttcgtt 360

tcatcttctc tgctgtaata tatgagcgtt tcatgtgca 399

<210> 349
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f04b1

<400> 349

tcgcccttc gttcgctcct agcatgctat atacctacat agtacagcca tggcccccac 60

cgtgatggcc tcgtcgtcca cct 83

<210> 350
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f05b1

<400> 350

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tccgcatcat aaagaagctc ggcggcaccg tggatgacac cgagcttgtc cgcggcctca 180

tctttgacaa gaaggccagc catgctgccg gggggccatc taggatcgag aatgccaaga 240

tcgctgtcat ccagtttcag atctcaccgc ccaagactga tattgagcag agcgtcatcg 300

tgtcagacta tgcgcagatg gaccgcattc tccgtgagga gcggaattac atcctaggga 360

tggtcaagaa gatcaaggcg tctggatgca atgtcctcct catccagaag agcatcttgc 420

gtgatgcggt gactgagttg tcgctgcact atctc 455

<210> 351
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f06b1

<400> 351

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accccgtcgg cttcaacctc gtcgacgtcc tcgcctgggg ctccatcggc cacatcgtcg 120

cctactacat cctcgccacc accagcaacg gatacgaccc acccttcttc ggctgatccc 180

tcccatgtct gcctgcctgc gtgccgaccg gaccggcttg ctgttgtaat ccgccgtgtt 240

ttcattagtt ctctatacgc tgatgatgta ctatcatgtt tgtatgtatg tgagatggtg 300

aaagattaat ctggacaagt agtg 324

<210> 352
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f07b1

<400> 352

caagatgaag cctgccccga agccgaagcc cgcccccgtg gccacctcga gcgtaggcat 60

cgacgacgag ctcgccaagt ggtacggccc tgacaggagg atctacttgc ccaacggact 120

ccttgaccgg tcggaggtgc cggagtacct caacggagag gttcccggag actacggcta 180

tgatcctttt ggtctgggca agaagccaga ggacttcgcc aagtaccagg cctttgagct 240

catccatgcc aggtgggcca tgctcggcgc cgccggattc atcatccccg aggcgctcaa 300

caagttcggc gcaaactgcg gtcccgaggc cgtttggttc aagactggcg cccttctcct 360

tgacggcaac accctcaact acttcggcaa cagcatcccc atcaacctga tcctcgccgt 420

cgtcgccgag gtcgtcctcg tcggaggcgc cgagtactac aggatcacca acggactgga 480

atttgat 487

<210> 353
<211> 394
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f08b1

<400> 353

cccgttacgc ggccatctca caggacaatg ggctggtgcc gattgtggag cctgagatca 60

tgctcgacgg tgagcacggc atcgagagga ccttcgaggt cgcgcagaag gtgtgggcgg 120

agaccttcta ctacatggcc cagaacaacg tcatgtttga gggcatcctc ctgaagccaa 180

gcatggtgac ccctggtgcc gagtgcaagg acagggccac ccccgaggaa gtggccagct 240

acaccctcaa gctcctccag agaaggatcc ccccttccgt ccccggcatc atgttcttgt 300

ctggcggaca gtcggaggtg gaggcgacgc tgaacctgaa cgcgatgaac caggcgccga 360

acccgtggca cgtgttcttc tcctacgcgc gggc 394

<210> 354
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f09b1

<400> 354

gccttctcct agcaagctat atacctacat agtacagcca tggcccccac cgtgatggcc 60

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agccgccgct ccaacggcgc tagcctcggc agcgtcagca acggtggaag gatcaggtgc 180

atgcaggtgt ggcccatcga gggcatcaag aagttcgaga ccctgtctta cctgccaccg 240

ctcagcacgg aggccctcct caagcaggtc gactacctga tccgctccaa gtgggtgcct 300

cgcctcgagt tcagcaaggt tgggttcatc ttccgtgagc acaacgcatc tcctgggtac 360

tacgatggcc ggtattggac aatgtggaag ctgcctatgt tcgggtgcac tgacgccaca 420

caggtgatca acgaggtgga g 441

<210> 355
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g01b1

<400> 355

aacgcacgca aaggccgagg aggacaagct aggaggagcg agcagccatg gcttcgtcgg 60

tggccgccgc ggcgagcacg ttcctcggga cccggctggc ggacccggcg ccgcagaacg 120

ggcgcatcgt ggcgcggttc ggcttcggca agaagaaggc cccgccgaag aaggccaagg 180

cgcccccgac caccgaccgg ccgctgtggt tccccggcgc gcaggcgccc gagtacctcg 240

acggcacgct cgtcggcgac tacggcttcg acccccttcgg cctcgggaag cccgcggagt 300

acctgcagta cgacgtggac tccctggacc agaacctggc ccagaacctg gcgggcgaga 360

tcatcggcac ccggttcgag gacgccgacg tcaagtccac cccgttccag ccctacgcc 419

<210> 356
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g03b1

<400> 356

tcgcccattc gtccgcccac gcgtccggaa aaacagtttt ccgaagcttc gagccagggc 60

ggttggcggc agccgcgggg acgatggtcg ggatcttctc caggttctct tccggcgccg 120

gccaccgccg cgccaagagt gccgtggagg ttgtggagac attggcgccc aacatggaga 180

ccggggagtc tgacccggca gctgatcctg gagatagccc gcacggcatt gaggtcggca 240

tcgagttcaa gccggtggag caccctgtgg agcctgtcaa ccttgaccaa ccagtgaaat 300

gcccgcttcc tgagccatct atactgcatg atgggaggat atggcaagag aggatgt 357

<210> 357
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g04b1

<400> 357

actaattgcc cttcccgaat caataggagg ctgcaagtcc ctggaagaat tgcaggctaa 60

tggaaataca atcgaagatg tgccctcatc aatttgcaac cttgcttgcc tcaaatctgt 120

atcattgaat ggaaacaaaa ttcgtcagct tcccccaaac ttgctgaagg attgcaaggc 180

tcttcagaac ttgtcactgc acagcaaccc aatctcgatg gaccagtttc agcaaatgga 240

tggattcggg gagtttgaag cacgcagaag gaagaagttt gacaagcaga ttgattcaaa 300

tgtgatgatg ggctccacag ccctggatga aggcattgat ttacgctagt tttgcgagtg 360

aacttatttt ttcctcatta gtcggaagta attgtaatct ttgtatatat cagtctcccc 420

acaatctgat tcggtaaaga agtca 445

<210> 358
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g05b1

<400> 358

tcgatccttc tctcggttct tagtttcttt tccaccaccc acaggccaag gaggatgtct 60

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tgcaagatgt tccccgacgt ggaggccacc gccggcgccg ccgccatggt catgcccacc 180

gcctcccaca aggggagctc cggcgggttc gagacggccg gggagaccgg cggctgcgac 240

tgcaccacct gcaagtgcgg caccgcgtgc ggctgctcct gctgcagctg caactgagcc 300

ggcgcccagg aggccggcag aggcgagcac gaggatgagg aggaggacaa gcaagcaagc 360

accatcgtca ccagttcaca gcatgcgccc gcgcgcgcgc t 401

<210> 359
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g06b1

<400> 359

ttgcggacgc gtgggcatcg acgaccttgt gtctgtcgac acccttattg aggaagtgct 60

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ctagaatctt tgttcgccca cctgttgctg ctggattctt ggtactggga ttggttgatc 180

tggaaaacat tatgtcgtcc catttagtta cccctcttac agaaatgcta ctggttttgt 240

ttttgagtga tgccctggtc ttgaatgcct gctaccttta aatagttgaa ttgctgagcg 300

gtttgtaatg gcgaaacatc tatcatgtgg agtaaaatca gtctttgat 349

<210> 360
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g07b1

<400> 360

gccagccatg ggaagcaagg gcttcaaggg tgtgatagtg tgtttactca tactggggtt 60

ggttctggaa cagctgcagg tagaaggcaa gagctgctgc aggagcaccc tgggaagaaa 120

ctgctacaac ctttgccgcg cccgtggtgc tcagaagtta tgcgcaggcg tctgtaggtg 180

taaaatctca agtggcctaa gctgccctaa aggcttccct aaattggccc ttgagtccaa 240

ctcagatgaa ccagacacca ttgagtactg caacttggga tgtaggtctt ccgtgtgtga 300

ctacatggtc aacgcagctg ctgacgatga agagatgaaa ctctatgtgg aaaattgtgc 360

tgatgcttgt gtcagtttct gtaacggtga tgctggcctc ccatcccttg atgcgtactg 420

atgcgtgtcc atggtctgag atttcac 447

<210> 361
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008g09b1

<400> 361

ctccgagtac gaaaagattg ttcatgatgc tccgccaccg cattcgcatc gaataactga 60

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gatgaagcta taggacaact ttgtttcgag tcatatttac atgtcacact tgaattgttc 180

ctatagaaaa taatgtgtgg gacaaatgtt cgcacttttg gctaggctga atattccata 240

ccaaatctag tagtatcagt ttgaaatttt acatgttgta ttcttctcta 290

<210> 362
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008h03b1

<400> 362

cccactcgtc cgcggacgcg tgggctcctc ctagcaagct atatacctac atagtacagc 60

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gtccaccgcc ggcctccccg tcagccgccg ctccaacggc gctagcctcg gcagcgtcag 180

caacggtgga aggatcaggt gcatgcaggt gtggcccatc gagggcatca agaagttcga 240

gaccctgtct tacctgccac cgctcagcac ggaggccctc ctcaagcagg tcgactacct 300

gatccgctcc aagtgggtgc cttgcctcga gttcagcaag gttgggttca tcttccgtga 360

gcacaacgca tctcctgggt actacgatgg ccggtattgg acaatgtgga agc 413

<210> 363
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008h05b1

<400> 363

agaaggtgct ctggctgagg agaacatgcg tggcatttgc tttgaggtct gtgatgttgt 60

tctgcacact gatgctattc acaggggtgg tggtcaggtc atcccaacag ccaggagggt 120

catttacgct tctcagctca ctgctaagcc aaggctgctg gagcctgtgt acctggttga 180

gatccaggcc ccggagaatg cactcggtgg tatctatggt gttctgaatc agaagagagg 240

gcatgtgttt gaggagatgc agaggcctgg taccccgctg tacaacatca aggcttacct 300

cccggtcatc gagtcgttcg ggttctcaag taccctcagg gcggcgacat ccggccaggc 360

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ctcccagtct gccacacttg tcacggagat ccgcaagcgc aa 462

<210> 364
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008h06b1

<400> 364

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cagacttctc cagtcatcgt ctgcggcaat tgcagatcgc cggagtggcc tcctctggcc 120

atagagaggc cttgccgttt gccgccgctg tcgtcggcag tcatgtggcg gattgaagcg 180

ccggagggcg ccgcttcgac gcgcctacag aggagggcgt tgtcaaccat ggggtgcctc 240

tggtgctgcg ccgctggagc gctgtcgagg ccgagggtcc tcgtgtcctt ggggccggag 300

ggagggtcag ggacggtgga gccgtcgagt tcttggccta attgctctct ggaagaggcg 360

tgcgtgataa cgtgttggag agaatcgaga gagaggagcg aatggaaaac agatatatga 420

atgaacagtt attctattga tcgaagattg gggtatttat acc 463

<210> 365
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008h07b1

<400> 365

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gtcgcctatc ccctcgcctc atcttatccc cctccgtccc cgcttcctcc tcctcttcct 120

cccgctcact ccccgaagcg aagcctcgag agctcccaat ggcttccacc acgttctcct 180

ccgccttctc catcctctct ctcccctctt cctcaccatc cccctccgcc tcggccccca 240

ggaccctccc cgtcgccaac cgccgccgcc gcgccgtcgc cgtcgcctcc accgtcactg 300

agtccccgaa ggtccttgag ctcggcgacg ccattgccgg gctcaccctt gaggaggctc 360

gcaaccttgt cgaccatctc caagaacgtc ttggcgtctc 400

<210> 366
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008h08b1

<400> 366

tcggcgcgat cttgctagcg aaggtaatga aattatccga gcagcttgca aatggagtcc 60

tgaactagcc gcagcttgtg aagtatggaa ggcgatcaaa ttcgagttcg agccggtaga 120

tactattgat cagtagataa aactaaagat aaagaagaga aggtataaca t 171

<210> 367
<211> 327
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189008h09b1

<400> 367

cccactcgtc cgaccggaag agacaatgac tggcatctgc aagcaagcaa ttgaatgcat 60

tatggcggca tcataaatca ggatacagtt cagaagtagt ttgagatcta caaacaagaa 120

actggctgnc gcataaatga gagcatagtg gcattaggtt cacatcacat ggttgattag 180

tttcttcaga agttatttga acaaagacac atatattgtt atcgtaaagg aacctgtact 240

gttgtaatgt gacaaacaga agatttatta ccatgcaaac cggtatgtcc gtagcctgtt 300

acaagcacgg aattgcaatg atcaana 327

<210> 368
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009a07b1

<400> 368

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ctacgtcact gacctgagct acaacgcgca gaagctgggc caagcggcgg cagcggcgcc 120

aggcgcgggc gggtcctaca tgcagccgca ggggcacttc tcgtacccgg cggcggcggc 180

gcagggaggc atgctcgcgc ccaacggcat gatgcccgtg tacccctact accactatca 240

tcactaccac cacggctcgc aggggctggg cgtcccggcc gcgcgcttct tcccgccggt 300

ctccgccgcc gtgcccaccg ttcccgccat catctccaag cccaccgtca tggtgcctcc 360

caaagtggag caggtggctg ggtgcagctg aaggcacggt gacggtgcga ggaattag 418

<210> 369
<211> 81
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009a10b1

<400> 369

ctgttaattg tttgtgtacg ggtgatttaa gtaacctgtg cacttgtgct tataattaat 60

cagttgaagc attgcatgaa t 81

<210> 370
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009a11b1

<400> 370

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atttttttctt tcatattgtg gagacgcttg ttcgtttctt caacaaatat gcatatgtac 120

agatagctgt caacggacag agtttcaatc gttcagctag ggatgcttgg gagctgttcc 180

agtcgactgg cattgaagca cttattgctt atgattgttc tggtgctgtt cttttgatga 240

gcacaatatt aggtgggtta attacaggaa cttgtactgg tgtttggaca tatttcacac 300

aacgtgataa agcaattatg gttggctcga cctctatgct gattggcatg atactggttg 360

ggctagctgt cgtggttgtt gaaagcgcag ttacatcaat atacatatgc tatgctgagg 420

accctcttct aattcagaga tgggatcctg aatttttga gcaaatgtca gaagcactgc 480

accagcgact 490

<210> 371
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009a12b1

<400> 371

gtcgaactcc gctctttcgc ccactctgaa gggcagcgag gtgtgcacgg tttcgccgag 60

cgtgggcgag tggagcccgg agctggtgaa ccctcacgtg gtccgcgcga tgaaaggtcg 120

catcgaatgg ccccagggcg cgaagaagca gagcctgaag tcaaagcctc tggattcgag 180

attcgacggc cgcaaggtcc agctgcgcca agcattgaag cagaagatat aggatggccc 240

gtccacacgc tgtatccaat ttctgaatat aggacgatct tgccttggaa gggtgcctgg 300

tctgtaagaa ggaatgactt gtagtaacat tggtccctga aatgggtgcc tatcatcggc 360

tgtacctaat tgatgttctg atagcccttt agctcgcata gaatattcac gacgcccttg 420

taatcaaatg tagtattagt agtgtctttc aatcaaatgc attacttagg c 471

<210> 372
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009b07b1

<400> 372

gcttcatcgg ccagcgccca cacgagcagc tccccaccgc cgactactga aaatatcaat 60

ccgaatccca tccatcagtc atcgccatga gagactgaaa ttgcttcaag aatcaagcag 120

gtgttatcgt gtcatcagca agcccgttta gtttcatcgt ctctctctct tgtctttgag 180

aaattcaggg taaacagtga gtcagtcagt cagtcaggaa taatctcttg tcttggtgta 240

cgtacgtcct caattatgaa tgcttctatt ccatggtcat gattgatgtt tgtcca 296

<210> 373
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009b08b1

<400> 373

ctctcacgcg catcctagca accggcggcg gcaggcggaa ggcgaacaag aaggcggcga 60

cgatggggca ctccaacgtc tggaactccc accccaagaa ctacgggccc ggctcccgcg 120

tctgccgggt ctgtggaaac tcccatggac tgatcaggaa gtatgggctg atgtgttgca 180

ggcagtgttt ccgcagcaac gccaaggaca ttggcttcat caagtaccgt taattcacct 240

gttcctggta ccctgaagtg aagctgatca gggatgaagg attggagcac ttaatagaat 300

gcttaatttc aattccagta atgtttgctc gtggttttat gttttgatgg atactgaatg 360

atgtaattgt tgaacatgag ttaattaccc atggagaagt cttttatcgt tc 412

<210> 374
<211> 283
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009b09b1

<400> 374

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tgatgctggt attgtatgtg tacacaagaa taaacacggt gctgtcacga ggtcctggaa 120

cctggagttg ctgctgagct gctctgtagt ttacctggta tattctggtg cattggcgac 180

caggctgcag tgatctcaga ttggaatatc cgtctctatg aaggaacata ctttgtaaac 240

atatgttgtc gaacctttgc tttgtttgcc ggacaagtnt tgt 283

<210> 375
<211> 448
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009b10b1

<400> 375

acctcgccgt ttcagtcggt tcccatcccc cctcgcgtgc gtttcttctt cctccaagtc 60

caggccgggt gggagagagg cggggcgacc gacgatgaag gagtactgga cgatgctggc 120

gtccctcatg ggcgcgctgg cgttcctgca aggggtgctg cacgccgtgt tcccggcgga 180

gctgcgggcg gcgctggcgc ggctgctcgg gcgcctcacc cgcgccttct cgccctactg 240

ctacttcgac gtcacggaga cggacgggat gagcaacaac gagatctacg acgccgtgca 300

gctctacctc agcagcacgg ccgcgccggc atcgggggcc cggctcagcc tcacgcgccc 360

gcacaacgcc acctncttca ccttcgggct cgccgccagc gaccgcgtcg tcgacgcctt 420

ccgcggcgcg gccgtcacgt gggagcac 448

<210> 376
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009b11b1

<400> 376

gctttgcacc gttgctttgt cggccgtgct gcctgtcgcc gtaaggggca ggccggcggc 60

gaggaggagg agcgccaccg ttgctggcgg cggcagaagg accgtgggtg ccggcgtccg 120

ggcatcggcg gcggcggcgc cggaggcgga ctacagctcc agcgtctcgg tgttccccat 180

ggaggcctgc gacctggtcg gcggcgaggc gtgcgaggcg catatgtacc cggagacgaa 240

gctcggcgcc ggtgcaggcg cccc 264

<210> 377
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c07b1

<400> 377

cgctcactgg ctcgcctcct ctcacccatg gccggcgccg ccacgctcgt cctctccctc 60

acggccgccg gcgccgttcc tcttcgcgcc cagcttctca cctggacggc ccccgacccc 120

gcggccggcc ccgccgtctg gacgtcgctg tcggacgccg tcatgggcga cggcgccgac 180

cagccacccc gccgctggat cctccttccc cggccggcgc cggccatggc gaccaccacg 240

cgtacaagta caaaagccct catgctccaa tgagatccag cgagacaggt tcgtccccat 300

ctagcccggt cagcgctcgt accctgcatc gaccagatcc actcgacgtc gtcgtacaga 360

tccgcacgat gtcgacggtc agtgttgagg agcgcctctg ccaccactcc tctgggatc 419

<210> 378
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c08b1

<400> 378

ccctcgcgtc cgcggacgcg tgggggggcat tttcttgcat ccacgacggc aatggccacc 60

gctgatgtcc agaacccgac ggccgcgctg acggaggagg cgcccgcggt ggagacgccc 120

gtcgccgccg aggaggccac gaagacggag gaggtccccg cgccggcgga ggccgaggtc 180

gaggcgcttg tccccgtcga ggttgaggag accaaggagg aggcgccggc agccgctgag 240

acggaggaga ccaaggagcc cgagccagca gctgccgccg agccggaggc cgaggcgccc 300

aaagagccag aggcgccagc cgtcgtcgag gcagagacca aggaggccgt ggctgaggca 360

gagccggcag tcgtcgagga ggtgaaggag gaggcggcgc ctgctgccga gccagaggtg 420

ccggccgtcg ccgaggaagc accggctgca gcggagcggg cacccgc 467

<210> 379
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009c10b1

<400> 379

gcttacaagc accagcgagg agagtcgagg cgcgcacgtg ggtgggtctg cgcgcgccgt 60

ccgcctcctc caccaggccg ccgtcgcggt cgtcgtcgtc ctagatccaa cagcctacgt 120

ccctgctcgg acgcgtgcgc cgagcggagg gacgagcgat ggccgccggc cgtgggctcc 180

cgctcctcct cgtcatcgcc gccctcctgg tcgggctcgc ctccgcttcc cccttcatct 240

ccgacggcgt gttccaggcg agcgccggat ctaccacggg gaggaccttg ctgcaggcca 300

agagggattg tcctgtgaac ttcgagttcc aaaactacac cgtcatcaca agcaggtgca 360

aagggccgaa atatcctcct aaagactgct gtgattcttt caaggaattt gcatgcccgt 420

ttaataacta catcaatgat gaaagcaatg actgtgcatc cacaatgttc agctacatc 479

<210> 380
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009c11b1

<400> 380

ctctcctggt caccggcgag aaaaagcaag atggactaca tgaatgggcc aggccggaac 60

cacctgttcg tccctgggcc ggtgaacatc ccggaccagg tgatccgcgc catgagccgg 120

cagaacgagg actaccgctc gccggcgatc cctgccctca ccaagaccct gctggaggac 180

gtgaagaaga tcttcaagac caccaccggc acccccttcc tcttccccac caccggcacc 240

ggcgcctggg agagcgcgct caccaacacg ctctccccgg gggaccggat cgtgtccttc 300

tcgctggggc agttcagcct gctgtggatc gaccagcagc agcgcctcgg cttcagcgtg 360

gacgtggtgg agtccgactg gggctacggc gccgacctcg gcgccctcga gtccaagctc 420

cgcactgact cgcagcacac ca 442

<210> 381
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009c12b1

<400> 381

cggtcgcgtg ggcgggaaga tatcggacat ggacatccag cggctggcca tcgaggccgg 60

cgagcacttc acgctcgacg aggtcagaga gatgatccag gccgccgacg aaaacggtga 120

cggcgaggtc gacatggagg agtttatgag gatgatgaag cggacgggct tcggcactgg 180

attctagtag aacagagcag aggacaagct gaatgaaccg acataattcg cgggttgtac 240

ttacttgtac atgtacctac tcgatcgtgc tgcataccta catgtagtca cgcatgttcg 300

cacctgggat ttcttttgcg aggtgtttgc gtacatgtac caaaattacc tggcgccgac 360

aagtggtgct gttctgctgc caaaaaaaaa atgggtttgc ttatctc 407

<210> 382
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009d07b1

<400> 382

ctctgttctc gcatcgatga agaacgtagc gaaatgcgat acctggtgtg aattgcagaa 60

tcccgcgaac catcgagtct ttgaacgcaa gttgcgcccg aggccactcg gccgagggca 120

cgcctgcctg ggcgtcacgc c 141

<210> 383
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009d08b1

<400> 383

aaatataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggagg acgaatctaa 60

aga 63

<210> 384
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d09b1

<400> 384

gagtttagca atgttgggct catcttccgt gagcacaacg catctcctgg gtactacgat 60

ggcctctctc cctc 74

<210> 385
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d10b1

<400> 385

gggttatggc cagcctattg gtcgctacga tgatatgtgg gctggatggt gcaccaaggt 60

gattactgat catttgagcc tgggtattaa gactggtctg ccctacatct ggcacagcaa 120

agcaagcaac ccatttgtga acctaaagaa ggaatacaac ggcatcttct ggcaggagga 180

gctgatcccc ttcttccagt ccgtgactct ctcaaaggag gccaccactg tccagaagtg 240

ttaccttgag ctggccaagc aggtgagggc gaagctgggc aaggtggatg gctacttcaa 300

caagcttgct gatgccatgg tcacatggat cgaggcttgg gatgagctca acccaccaaa 360

gggtgcaatt accaccacca acggccctgc tctgaagagc aagtgagact gtgagaggca 420

gtagcataca tatac 435

<210> 386
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d12b1

<400> 386

cagttgccgc cgccgcctcc tcttccccca atgcagtgga ggacaatgag acaaacaact 60

tccctagatg aagaaagaga ctctacagct aaagacatgc ttaagaatgc ctcaagtcta 120

ccacctgtac acactcctgt gcaggaacaa tatcttccgc cgtgtgcacc accatttcca 180

caaggaaatg ttaaggaagt gaaccatcag aaagttgatg tgatcaaaga agggagtaat 240

cttcctaata tatttgagat caaatcaagc ttgcttcagc aaatcaggga taagccagat 300

ctgcacaagc tgaatggaca tgaaaagccc aaagcagtat ttaatgatgt taacagtttg 360

gacgaaaggg gggagttgct tcagcaaatc aggagcaaga cattcaactt aagacgaaca 420

aatggatcta agacaaacac c 441

<210> 387
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009e08b1

<400> 387

gtggacccaa gaaggttaag ctgatgtgct cctattgcaa gcggcatacg gagtctgaag 60

ttccagatcc ttactatgga ggcgctaagg gatttgaaaa ggtactggat ctgctggaag 120

atgcatgcga gtcattactt gacagcatca tggcggagaa tgaaaacatt tctgcttgat 180

ctcagaatga atttccctga gccaatgtaa gcgtcacatt ttaatttgat tgtaccaggg 240

atcagttgca aagatgtgga ttagctttct gtgagccatc atctcttcag cccagataat 300

tgtaatgata attaactaaa aatacactct ctcatcacca tgcgtatata tgtgttaggc 360

tggatac 367

<210> 388
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009e09b1

<400> 388

acctagctcc agacgcctcc tcctcctccc ccgccgccgc cgcactctcc agagaccgca 60

ggcatgggcg tcttcacctt cgtgtgccgc gactccggcg ccgagtggtc ggccaagcag 120

cacaagggcg agctcgaggc ctccgccgcc acccccctacg acctgcagcg ccagctcgtg 180

tccgccgcct gcgccgagga caagtccggt ggcgtccagt cctccttcac catggtctcc 240

cccaagtccg ccatcttcca ggtggtcatt ggtggcgcct ctgctggtcc gatcggtggt 300

ggtggtgctg caggtggtgc cgctgcatca ggtggagctg ccgccgaggc ccccaaggct 360

gaggagaaga aggaagagga gaaggaggag agcgaggatg accttggctt ctccctcttc 420

gattagatct tctttacc 438

<210> 389
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009e11b1

<400> 389

cccacgcgtc cgcaacaaga tgctttcgtg tgccggggct gataggctcc agactggtat 60

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cctttctgtg cggtgcaagc ccaacaatgc catccatgcc actgaggccc ttcgtcgtgc 180

caagttcaag ttccctggcc gccaaaagat cattgagagc aggaagtggg gcttcaccaa 240

gttcaaccgc aacgactacc tcaagttcaa gagtgagggc aggatcttgc ctgatggagt 300

caacgctaag ctgctcggat gccatggccg ccttgcgaac cgtgcccctg gacaagcttt 360

cctgtctgcc gcataatcta gcagaagaag tctatccgtt ctatcagaac ttattttact 420

<210> 390
<211> 480
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009f07b1

<400> 390

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gaggtacttc agccaggtga tggcggcggc gctgagggag ggcgcggacc accacgggaa 120

ggaggccctg tcgcgggtgg cggtgacgcg gtcggacgtg gacatggacg gcatcagggc 180

ggcctaccag gagcagttcg gggccaagct cgaggacgcc gtcgccggca gcgcgcacgg 240

gcacttcaag gacgcgctcg tctcgctcat cgtcggcaag taaaccatat ccggaggggg 300

ttcttcttcg tcttccagtg gtgatggcgc gccggccgtg cgtgtgtttt tcttcctgct 360

tcatctcgtg tcgtgtgtgc ctttgtatgt tgaattgttg tcgagcggng catgtaaaca 420

tttgcagctg aggtcgtgta cggctgatcg gngatcaaat aaagttgaac atttgggtct 480

<210> 391
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009f08b1

<400> 391

cggacgcgtg ggcggacgcg tgggtcacaa cacccctcca tccacctttt gccagcgtga 60

gagcttcttc tttcttgcga gggagaggac agcgagcaac cagggagcta ggcgtcaatg 120

gcgaccatag ccacgatgac catgctcaag cccgccggcc tggccgccgc gccggagccg 180

gcctccgccg ccgtgcagga gctcgccgcg ctggcggcgg tagcgcccgc cgacgacaac 240

cggggcctgc tgctgctctt cgtggtggcg cccgccctcg gatgggtgct ctacaacatc 300

ctgcagccgg cgctgaacca gctcaacaaa atgcggtcca actgagcgtc gtcgtcgtcg 360

tggcatcgca tgcggtccgg ccgagtgggt tcgtatgtgt gtgttcgtct attaagagtc 420

gtggtagtag cgtggaacgt ggtgtgagtg cctgcttgca tactctctaa tc 472

<210> 392
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009f10b1

<400> 392

cggacgcgtg ggttgcgtgt ctactccgtc cagctccagg cgctcgacgc gctccgcggc 60

tccggcatca gcctcagcct cggcaccacc aacaacgacg tggccgtcct cgccagcagc 120

ctgtccgccg ccgccgcatg ggtgcaggcc aacgtcaagc cctactaccg cgccgccgtg 180

gacgtgcgct acatctccgt cggcaacgag cttgccagcg acaccgcgca gagcatcctg 240

gcggcgatgc ggaacctcaa cgacgccctt gcggccgagg gcctcggcgg cgccggcgcc 300

ggcatcaagg tgtccacggc ggtgaggctg gacgtgatcg ccaactcctt cccgccctcc 360

gccgctgtgt ttgcgcagcc ctacatgggc gacgt 395

<210> 393
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009f12b1

<400> 393

ccatcttctc cgtcctggcc gccgccgcca ccgccaccag tatctacacc tgctacgaag 60

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gcggcttcgt gccgctgctc ccaattgagg tgatgaagga ccggtgctgc cgggagctgg 180

ccgccatctc gtccaactgc cgctgcgagg ggctgcgcgt cttcatcgac cgggcgttcc 240

ctcccagcca aagccaaggc ggtggccccc cgcagccgcc gctggcacct aggtgcccga 300

cggaggtgaa gagggacttc gccagaacgc tcgccctgcc ggggcagtgc aacctgccga 360

ccatccatgg cggcccctac tgcgtcttcc catgaacgct agcttgttca tgaaaacatt 420

gtgtgaatga ataagctagc agcatgtcac a 451

<210> 394
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009g08b1

<400> 394

accagcctcc tcagtcctca cagcatcctc tcagtcctta gcttccttcc ctcgccgcca 60

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aagtgcggca acggctgcgg cgggtgcaag atgttccccg acgtggaggc caccgccggc 180

gccgccgcca tggtcatgcc caccgcctcc cacaagggga gctccggcgg gttcgagacg 240

gccggggaga ccggcggctg cgactgcacc acctgcaagt gcggcaccgc gtgcggctgc 300

tcctgctgca gctgcaactg agccggcgcc caggaggccg gccggcagag gcgagcacga 360

ggatgaggag gacaatgcaa gcagcaccat caccaccagt tcaccaccac ccagcgtatc 420

atcaccagcc gccgcatgcg ctcgcgggcg c 451

<210> 395
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009g10b1

<400> 395

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atgcatttcc tcttgttcca ggcaagagcc tttgatgacc atgtatttgc cttctatgag 120

tatctttgtc taactgtcaa cataccttca aactgtatgt ggtgcaatct ttggataaga 180

gaatgctaaa ctttttttcga tt 202

<210> 396
<211> 76
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009g11b1

<400> 396

tttcgcccac gcgtccgccc acgcgtccgg aaataacttt gaaatcgcgg taatagaaac 60

cagaacgttc ccatgg 76

<210> 397
<211> 249
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009g12b1

<400> 397

ggagcttttg gatggtgatt gacaaaggca ccaacaagga agatcagaga gttgcatttc 60

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cgctacggaa ctggagttct accactatat gtatctttac tgtctgcgac caagatgtgt 180

gttttctccc gtttgtatat ttatttgtat cgtgtgatcc acttgcgtag tgatgacatg 240

cttgctcta 249

<210> 398
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009h07b1

<400> 398

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tgccgtctct gtgggcgccg gcgcgcgacg gcgagcagag gcagcacctg ccccgtgccg 120

gcgcggcggc ggggagggag ctggggcggc gcgcggagga cggcgtcggc cacggcaacg 180

gcaagacggc caaggtgatg cacctgctgc tctgggggcc caagtgagat gagatcggcc 240

aggtttcccg ccggccggct tcccgcgtgc ccgtgggcgg tggcggaccg gccggactgt 300

acactagttg ctgcatgctc cttcagtttg ccgcgttctt tcttcaccgc ttttgtttgt 360

aatggccagt ttgctgctgt gtatgcgaag tttgtactgt acatagcgaa atatatatgg 420

atgcgatctg tgtcgttaga ccatgtaat 449

<210> 399
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009h08b1

<400> 399

cccacgcgtc cgaaaagagt tgctaatccg ccatggcaat tctcaagaga aacacaaggg 60

ttgtatgctt ggtggtgctt gtggtcatgg cgacgacctt attgcccttc tcaactacac 120

atggggcgtg cttagtggca ccggaatgct cgggtcccta cccgaatgta atatgtggtg 180

agttatgcgc tcgttatggt tacagcaaaa atggatagtg caaagattca agaaattgtt 240

gttgtagtgg caaaaaatta aaagagtcgg tccaggtgga tcctacaaca aatccatagg 300

agagaaactc tagaagctgc tgcgccacaa tatgtaattg tgagatgaat aaattcgaaa 360

tgaaata 367

<210> 400
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009h09b1

<400> 400

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tacgtctcaa catggtaact ttctcggtta attaacctgt attgcaaccc ccagtggcgg 120

taggatttcc atcatgtaaa agtgttgtct gtaatcacga gggacaagga tagaacattt 180

gctgccactt tgtggcgcgg tctaaagtct tggagcaatc acaagaagca acatattcta 240

gtctggatat g 251

<210> 401
<211> 206
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009h10b1

<400> 401

gggtgtgcta tgcgcggggt cgcgtgacgt gggctaaata aaagtgttgt cgggtcgggt 60

cgacgcccag tgtcggtcag cagcgagcga cgcagtgcca ctctcgccgg cctgcgtctg 120

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gatcggtatc ctaaccggtt tgcgtt 206

<210> 402
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009h11b1

<400> 402

tgtcctcata ttatatttta tatcctctca ctagttggtt ccgttccttt tgatgaatga 60

cgaagtgtgg ttggcagt 78

<210> 403

<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009h12b1

<400> 403

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ttaaaaactg ggactagatc gggagaagaa gatgtggtgc ttgaggtatt tgttcatgtt 120

tctcttggag agatgcatgc atgcatgggg agatctcgcc tgacgggttt ggtgcatata 180

tatggcctat gggtgttgct gcctggccgg ttgaagctgc agctttgttg tagccatgaa 240

cctgtttttt ttgtttctct ccagaaaatc tgtaccaaga gcctgtgaaa agctatgtgt 300

gtatgagaga ctatgagcta gcaaaaagtt cttcctcctt cccatgccat gtttatccgg 360

ttgttccttg ccttgttggt ttctcctgtg catccaaaat aaccgtggtg ttaattcctg 420

caatacgcag aggaagaacc agccatggtg cttaattct 459

<210> 404
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010a01b1

<400> 404

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cggcggggcc ctccagttat cgatctatct accatctcgt cgtcttcgtc agcaagttat 180

cttcagttcc tgtgtcagtc agtctgagtc gtcgtgtgtg tcgttgagtc ctgtggtgtt 240

tttgatcgcg agctcgagtg tcgctctgtc cggggttaat tagagctggt tacgcgagga 300

agaaacaaca tgtgttatct ttcagtcttg gtcggtcggt cgtcggtgat gcagcaatcc 360

cttctgtcat ggattgggat gtgatgttgg aatatcctat gtttgaactc ggtttaaatg 420

gaagaaaatg caagtcgtc 439

<210> 405
<211> 409
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010a02b1

<400> 405

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agtttgagta aaccattgct tcctctgggg tctacaatac atataactca ctatagtact 120

aatactattt ttaccacatc gaaaaatttt atgttgagaa ggagatccgc aaggactcgg 180

ccaagaagac ggacaaaaag tcgcgcgtca aggtgttact caagctcgtc aacttcaccc 240

acctcatgcc cacccgctac accctcgacg tcgacctcaa ggaggtggcc tccggggcgc 300

ccgactccct cacctccaag gacaagaagg tgggcgccga caaggccgcc aaggccaagc 360

tcgaggagag gttcaagacc ggcaagaaca ggtggttctt caccaagct 409

<210> 406
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010b01b1

<400> 406

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cctcactctg gctgccttgg gttgttctgc gcttgtggag tactatgatc accagtcagg 120

ttcaggatca aaggttcacg actatgcaaa gcagttcctt ccatcggaca gaaacgccaa 180

aaaggactcc gtgtagaaga ggcagcaagt tataatatag gcttccatta gctgatatgg 240

aatttgttga tgttattttc tgagcaaaca atctggcatt tcacatgccg ttatccaagt 300

tctgcaggct tcctgttctc tgtataagct accgaaccag catttagatg cagccgtatg 360

caaatccgtg gggatggaaa tatgtgcttt cctgaaccgt gcatgaatgt aatgaatgaa 420

atgtttctct cttacagtac tactgatgaa gtaaaccgac aaggcgagtt cgtgcgcaga 480

agcttctgct c 491

<210> 407
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010c01b1

<400> 407

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cctgaagacg ctgacagacc aatagcagtg tggataaagg agcatacccc gggaaaagca 120

tttgaagagg caaaacctgt gattgctgct ctaaaggaac aaggagcgtc tagcgttggg 180

gctgcaggtt attgctgggg tgcaaaggta gttgcagagt tagcgaaagc taatgagatc 240

caggcaggcg ttatgttgca cccttcattt gttactgcca atgatataga agaggctaaa 300

tgccccatcg ctatacttgg agctgaaact gacgt 335

<210> 408
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010c02b1

<400> 408

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ttaccaccct ccggccccgt cgtcgagcca ccacatcgac gcggatgagc tggacacttt 120

tacagacacg gagtgggtcc gcggccatca ctctgaggcg ccgtcgctgt accacctcga 180

cgccgacgag ctacacaagg taccaagccc gcaccaccac ggccaccacg ctacagcacc 240

ggtgccggtt caccaccacc acca 264

<210> 409
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010c03b1

<400> 409

ctactcgtgg tcgagagccg ctggcggggc tacccggacg cgccctccga gggcagctcc 60

ccctggggcg tcgccatggt cgtcctcctc ctcctcgtac tcaccagctt tcactccacc 120

ttccaggaca tgtggaaggc ttgatggaac gaacggttct ccgatccata cctcgtacgt 180

atgtgagtat gtatgtga 198

<210> 410
<211> 311
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010d01b1

<400> 410

acctgacctc catggcgagg gcaacgacaa ctggtggctc tgtggcggcg cgctcagcac 60

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gaacctcgtc ccaaaggacc gtgggcaact ggcatcttcc caacgagaag gtcgcggcgg 180

tggtggcgga agaccacgag tgcgagatga gggccggcga gaagcagcgg gatgagtgca 240

tggcgaggag gacgctcgcg gcgcacaccg actacatcta cacccaagat atcaaatggt 300

ttgttggccc c 311

<210> 411
<211> 160
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010d02b1

<400> 411

cggtcgcgtg ggggttggct catggttgtg tgtcaagcaa cactatcgtc tatgctatag 60

cgctgatgat gtttgaactg tcgatagttg gtaatggtgc atgcttgcta tatttgctat 120

gccgacctca aatatatcgt ttatggaggt tcctgttaaa 160

<210> 412
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010e01b1

<400> 412

ccctcgcgtc cgggaggtcg ctgatggagc aatgctgggc gacagaaccg tcggaacggc 60

caagcttcac ccagatcgcc gtcaggctgc gcgccatggc cgcgtcccag aaggtgcaat 120

cctagtagcg ccagcagtgg tcttgagaaa acttctgggg ccatccatcc gtcttggaca 180

agttcgtctt cgcatattgc gtattttaag aaaatccggt gctgatatat ataaatatta 240

tattt 245

<210> 413
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010e02b1

<400> 413

gttttctgaa tgttgatgtc aacgagttcc agaccaacct ggtgccctac ccgaggatcc 60

acttcatgct ttcctcctat gccccagtga tctcagccga gaaggcctac catgagcagc 120

tgtctgttgc cgagatcacc aacagcgcct ttgagccttc ctccatgatg gccaagtgcg 180

acccccgcca tggcaagtac atggcctgct gcctcatgta ccgtggtgat gttgtgccca 240

aggatgtcaa cgctgctgtg gccaccatca agaccaagcg cactatccag tttgttgact 300

ggtgccccac tggcttcaag tgtggtatca actaccagcc acctggtgtc gtcccaggcg 360

gtgaccttgc caaggtccag agggctgtgt gcatgatctc caactccacc agtgttgtcg 420

aggtcttttc ccgcatcgac cacaagtttg acctgatgta c 461

<210> 414
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010e03b1

<400> 414

ggactattct gtattacaat ttggtggagg aactttagga catccttggg gaaatgcacc 60

tggtgcagca gctaatcgag tggctttaga agcctgtgta caagctcgta acgaagggcg 120

cgatcttgct cgcgaaggta atgaaattat ccgagcagct tgcaaatgga gtcctgaact 180

agccgcagct tgtgaagtat ggaaggcgat caaattcgag ttcgagccgg tagatactat 240

tgataagtag ataaaactaa agataaagaa gagaaggtat 280

<210> 415
<211> 365
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010f01b1

<400> 415

cccacgcgtc cgcccacgcg tccgcggcgt tctcccggat ctgcctgtct aacattaagc 60

tccatggcag cgcaccagtc cgcccatgga aatgcgcggc tgtgagtggt ggtgcactcg 120

acgtgcagcc ctccccgtgc acagaattga ctagcacgtc cgggatgagc ttctgtacaa 180

attccctctg atgctgaatc aagtcttgca cttcagtttc ggtgtgtcaa tgcccttgat 240

tcctccaatg agatgacatc aaagggtagg ccaaacaatt tttgttttgt ttattacgta 300

ttatatcact ggaatctagt agttcaacaa gtgaaatgtt atccggtggt tcaatgcttg 360

tccac 365

<210> 416
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010f02b1

<400> 416

ccctcgcgtc cgaagcagtg aaagagaaga ggctaatcaa gctcaacagc cttcttttcc 60

agagagtgtg ctgtgtacgt agcagagcga agagttagag ccatggctgg ggtggtcggc 120

gtctggttcg ccaagttcgg ccgggaggcg gcgccggcgg tagaggcaga ggccgaggtc 180

gtcggacggc gacaccaggg cgacggcctg ctcgaggtgg aggccgtgaa gacggtgcag 240

atccaggaga ggaggaggag gaacagcgcc gtcctcgcca actccgagga cacggtgtgc 300

atgctcatgg accgcttcgc cccggcctga tgcgccggtg aaccggcggt gtccgtacgt 360

acgtgtaaat tccagggcac gtacgtaggg gcgcgggcac aagggaggag ccataccttg 420

atgtgcgggt tcctcttgta cataagctct ttttcatcgc taatcgagtg atagtagtag 480

ta 482

<210> 417
<211> 87
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010f03b1

<400> 417

ggttatgtcg cttgagttat agattgtgtt atctggatta tgtgccgtgc tggcatttgg 60

atcttaatct taatccttta gtctggc 87

<210> 418
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010g01b1

<400> 418

gcgctctcca cgctcgtccc gggggtctcc tacatccacg cgggccccgt gctccgcctc 60

cgctccccgg ccgccgaggc gctcggcccc acccacctcc tccactcccg ctacgccacc 120

aaggccgacc tcgccgccta cgcgccgcac ccggcccacg tcgccgccgt gcaggcgcac 180

gtcgccccca acgcgctcga cgccaccgcc gtcgactggg tcaacgccgc gggcgccccg 240

tcccccgtcg gccccggcgc cgccgtgcgc ctcaccctcg ccaaggtcaa ggagggcgtg 300

gaggtcgggc agctcgtgga gaaggtggcc gccgccacca aggacgccgg cgaggccagc 360

ggctccaagg tcagcttcgg ggagaacttc tcccccgcgc gggccaaggg gtaccagttc 420

gggatggtgg ccgtgttcgg cagcgtcgag gagctggacg ccgtggaggg cg 472

<210> 419
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010g02b1

<400> 419

cccacgcgtc cggatccccc gtgggattcc attcctgata gagcttactg ctgctgttgg 60

tgttcctggt gccaagtgtg cagtcaagac tccaaacagg gagtttgtgc ctctattctt 120

tgaagccatg gagtctctta tcaagtaagt gacggaaact tgaggatcgg tattccatca 180

aagttattca gttatgagca tacactggtg tgctgttcca tggaagtgtg aattgtattg 240

tgttgttatt gtatcactat tagatcaccg tatttaaact gttagtttct tggtttcaga 300

attttcctct agggatacac aacctggaca ttttgtgccg cataaattgt atatcggcct 360

gaacattttt tcttgccatg tcacagcaca tgaaaatacg tcttgtttct tttt 414

<210> 420
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010h01b1

<400> 420

gcacaattgt cgccaggcaa gacaagggga aggtctctga cagctagcaa gagagcaagg 60

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tgctggcggt ggtggtgggg ctgctggttg cgtggccgct tttcctgggt ggcagccgcg 180

aggcggtcat cgataccatc gccaaagcca tcgccgagct gctcggcccc gtgggcctgc 240

tcctcctccc gctggggctc ctcctcctca tccacctcct ctcctgcgac ggcggctcgc 300

ccgacgccgt gtaccatgtc ggtggatccc ccatcggcgt ggcgctcatg ctggtcctca 360

tcctcgccct cctctactac cggtcggcac tcttcggcag cggcggaggc gacgac 416

<210> 421
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189010h03b1

<400> 421

cggacgcgtg ggcggacgcg tgggttccga tccagcaccg ccgccgcaaa caccacacct 60

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ggaagaaggc ggtgacccgc tccgtcaagg ccgggctcca gttccccgtc ggccgcatcg 180

ggcgctacct caagaagggc cgctacgcgc agcgcgtcgg ctccggcgcc cccgtctacc 240

tcgccgccgt cctcgagtac ctcgccgccg aggtcctgga gcttgccggc aacgctgcca 300

aggacaacaa gaagacccgc atcatcccgc gccacctt 338

<210> 422
<211> 370
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a01b1

<400> 422

aaacgcacag catgcgcttg cagagaagcc atagagctgc ccgtgatcgg ttccagcacc 60

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cgatcatcga catggggctg ctggccgggg aggagcgacc cgcggccatg gacctgctgc 180

atgacgcatg cgagaactgg ggattctttc aggtcctgga ccacggcatc tcgacggagc 240

tgatggacga ggtggagaag atgaccaagg ggcactacaa gagggtgcgc gagcagaggt 300

tcctcgagtt cgcgagcaag acgctgcatg acggcggcag ggcggcggag aacctggact 360

gggagagcac 370

<210> 423
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a02b1

<400> 423

gctgttgatt aaccaagctc tgcaaggact gaatgaaact tgggagaaga agtttctgtc 60

cttggagcaa aacatgcgta gcgtgccctc ggcacgtgct gttcgtgttg gtgctaaaaa 120

gatcagcggt ggctgttgca aggggcaagc gatgtcaaat ttcacggcag gacacatttg 180

attcggcgga gggagaagaa gatcaagacg acggcgagga gcatgatgat gagcgttgga 240

gttagaccca acgcgggcct cctgttgtgg ctcagatttt gtctatagga ggacggtgca 300

tctgcacggg agcaatcagc cccgcgtgcg tgcagctcag ggtgtaaatc atgtgcaaat 360

ccctttgacc agatagatca tgtgcatatg ttttc 395

<210> 424
<211> 482
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189011a03b1

<400> 424

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ataagaaaag ggtgcacgat ctcgacgaat tacttctgaa taaattcaga aatcatatgg 120

aaagaaccat agcatttcgc gactcattgg taaatcaact ttgattctct ataaaccaag 180

aatgtgagac cattaacacg gttaaagcta aactgcttga agtccaggca aaaagaggta 240

ctctttctac aactatatta gtattagtac cgaatttaaa cgggaaatag ctaatgtaaa 300

atttatctga tatagaacac tcatatcgat aaaatggttt gaactattta ctagaaaaaa 360

aaaggggggca ccctgccctt ttttaaccaa tgccgaatcg acgacctatg tataaaaaag 420

agaaattctt tggatttgaa gaaaaaaaaa aaagaattct attaattntc attttccatt 480

ta 482

<210> 425
<211> 177
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a06b1

<400> 425

gtccttgccc tgcaccgcct agttgttttt atcttagtgt cgacgttgga tggttttggc 60

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ttgtggtact cgtggaacag ttcgttattg ttggttctac aatatgtgtt agttatt 177

<210> 426
<211> 114
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a09b1

<400> 426

cccacgcgtc cggatttatt atgttatgct gtttgagact aagtatctgt gcaatgagta 60

ctgcaaaacc tccttgggat ggtcttgtta gaatgaaaat ggttctacat taaa 114

<210> 427
<211> 311
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a10b1

<400> 427

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gagaggaact gatgtggcta tcaagcgcat caagaaaagc tgttttacag gacgatcatc 120

tgagcaagaa aggctggcac aagaattctg gcgagaagct gagattctgt caaagcttca 180

tcatccaaac gtcgtagcct tctatggcgt ggtgaaggac gggccgggcg gtaccctggc 240

gactctgacc gagttcatgg ttaatggttc tcttcggcat gtcttgcagc ggaaggacaa 300

gtgtcctgat c 311

<210> 428
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a11b1

<400> 428

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gccggcctcg tcggctcctg tgtcatctcg tatgcctgtg actacatcgt ttctcagaag 180

aagatcttcg gtggcaccat cccagggact gtgtccgaca aggagtggtt gaaggcgacg 240

gagcagaggt tccaggcctg gccccgggtc gctgggccgc cggtcatcat gaaccccatc 300

agccgccaga acttcatcgt caaggacctc aacccctgag gctcaagatc ttaaggtttg 360

cggtcggttg gaacctttac cctgat 386

<210> 429
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011a12b1

<400> 429

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ggtcacccgg caacgacaca agctcggcgg cgccgcgttc ggcagcgacc tcctgtcgcg 180

ggtcatgggc tccatcagcg acgagaagta cctcagggac atcgtcgtca gtttcgtgct 240

c 241

<210> 430
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011b06b1

<400> 430

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acggcatcga gaggaccttc gaggtcgcgc agaaggtgtg ggcggagacc ttctactaca 180

tggcccagaa caacgtcatg tttgagggca tcctcctgaa gccaagcatg gtgacccctg 240

gtgccgagtg caaggacagg gccacccccg aggaagtggc cagctacacc ctcaagctcc 300

tccagagaag gatcccccct tccgtccccg gcatcatgtt cttgtctggc ggtcagtcgg 360

aggtggaggc gacgctgaac ctg 383

<210> 431
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011b07b1

<400> 431

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gcttccggcg ctccccccagc tccaccggtc cgtccggcga tcgcgcggcg cggggtttcg 120

cgggtggatc gccggcagat tcgggcctcc gggcatggag cgccgcgggt tgctcaaggc 180

ggctctactg gcgtcgtgct tgctcgtggt ttgctccggg agagtaccta cggttataca 240

gcagccatcc actaccatat acaactcaac ccttgccaag acactagtgg aatatgctgc 300

tgccatatat actgctgatt tgacacaatt gttcacctgg acatgtgata gatgcggtga 360

cctgatcgag gggtttgaga tgatggacat catcgtagat gtggagaact gcttagaggc 420

atatgttggt t 431

<210> 432
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011b08b1

<400> 432

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gagctggatc gtcgtgtccc gccggtcgtg aaagaggtgc cgacctatgc tcgctctgca 180

gcagctgagg tgcagaagac aggcataatg ggcacagcaa ctggcctggc caagtcggcc 240

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cgcaaggctg ctgaagcctg ggc 323

<210> 433
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011b09b1

<400> 433

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ggtcgccctc ataaccattg gaacaaaaaa tggcgagcca gccgtgttct acaaatgcca 180

tcctgttagc agcagcagcg ctctcgctgt cggcgagcaa tacaaacttt attgttaata 240

tttcgttctt gtgattattt ttcgtgacga gaaaaggata cacagctgtt gtaccagaat 300

aagtaggcag caccttggt aaattgtaca agcgtttgga gtctttggta ggggtttgta 360

cgcatttgta tcgtcgacaa tttttagttg caaagattgt gtaaactctt gtttgactgt 420

tggtactgat ctgtctgcaa taggaagcac ctttttactc 460

<210> 434
<211> 69

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011b10b1

<400> 434

ctttccaaat gatccattcc attaccatat agtattttat aatttaagga aactgagtcc 60

aagcatcca 69

<210> 435
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011b11b1

<400> 435

cgaaacggtt catcaatgac accatcagaa gtgatttcca ccgcaagttt ctgcataggt 60

acatgaaatg atgctgctgt atgctttatg ttgtctggac agtatgcatg ctgaaagagc 120

ctgtgatgtt tctgtattct gaagatcgat ttgtatgaca taactgtaac agctacgtta 180

tcttaatggt gatatgttta ccctgttcct aagagtaaag aaaagaaccc actgcttgtg 240

tatt 244

<210> 436
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c01b1

<400> 436

tcggtggtag gacattacca ccaagatcca ccacaaggtc tccgagaact ggatctccgc 60

cacgctcctc atcacccccg tcgtcggcac ctaccagtat gcgatgtggt acaaggagcc 120

ggagaaagct gtcccacaga tactaaaggt ggagctttct ccaatatcgc agcagttgga 180

atttccatgt tctataatcc accaagagtg atttaacatt ttcggaatca cttctagttg 240

tactcttttg ctctttccgt tgcatatgca atgatgcagt aagtgtgact tgcaaaccta 300

ttttgaggcc tcaaatgttg agttgctcat cactggagtg attttgtgca ataaagcaaa 360

ttaaccagtc 370

<210> 437
<211> 282
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c04b1

<400> 437

tcgagattaa ccgctcgtta tcgtttcccc cgtgaaacca cccgaccccc ttggccgtct 60

ccccgccggt cgccggaggc atccaatcca agcgccgccc gcgcgccccc gctccgaccc 120

gatggcgtgg ggcgcgcccg cgcgggcgca gtcgttgcgg gtgcaggccc tctacgacct 180

ctgcaggcgc acctttctct tccccttctc cgccgaccct cccccggcca gcgccgtccg 240

cgccatatcc tccctcatgg atactatcag ccccgcggac gt 282

<210> 438
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c06b1

<400> 438

gccgggaaga agatgaacgt ccatttcatg gccaccccgg gcgccggcga gaagttcctg 60

ccgcggagcg aggccgacgc catcccgttc tcctcggaga aggcccccga gatcctcagc 120

cgcttctccg tggcgccgga ctccgccgag gccgcggaga tgaagcagac gctgcgcgag 180

tgcgaggcga cggcggccaa gggggagaag aagtcgtgcg ccacgtcgct ggagtccatg 240

gtggacttcg ccacgtccag cctcgggacc agccacgtga gggccgcctc cacggtggtc 300

ggaaaggagg ggtcgccgga gcaggagtac accatggccg gcgtgaggcg cg 352

<210> 439
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c07b1

<400> 439

ggagttagct gcactgtaat gctgaagcat gcgctgtaat tttttgtgag acggtggcct 60

gggcatggtg aactgaagca tggaggtagt tgagactcgt tgtactcgct ggatcatttg 120

ggccatgtcg tctatcattc ttcttgcttc gagaaaatct ctgtctaata ctgtgtggtt 180

aaaaaaaaaa aattaattta ataaaataaa aatatag 217

<210> 440
<211> 192
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c09b1

<400> 440

ggccagaact gtcgattgaa atgatcctac aagcagctca gccaaaacta gagccattcc 60

cctttgaaga gcacaccgac ctgccggttc aaggcctcgg tggcatcggt ggtggggagg 120

ttgaaggccc cactggtggt atgggtgggg aggttcaaga cctcactggt ggcatgggtg 180

gggagctccc gg 192

<210> 441
<211> 64
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c10b1

<400> 441

acgaccacgc gtccgaagcg gtgctgcaag gagagatggc gccaacatgt tctgtttgtt 60

cacg 64

<210> 442
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c11b1

<400> 442

cccacgcgtc cggtgaaatt gtatcagttt ctggaagtct tctattgttt tctatatcaa 60

tgtgttcata tgggaaacgt gatctgtcga attgacttta tatgaataaa atgaaactca 120

tattgtattg ta 132

<210> 443
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011c12b1

<400> 443

gggagaggcg gttgcagacg gacatcaaca tggcgcgccg cgcgctgcgc gaggcgctca 60

ccacgctcga cgacatcaag ccgcagcagc ccgacgtggc cgacggcgtc aatggggctg 120

ccgcagccgg cgccgacagc ggcagcccgg cggcctcgag ctcgtcggcc gcgttgctgt 180

cccagtgctc gccctccgcg gtcgggccgt acgtgctcac caccgcgaac atctcgggga 240

tgctcgacgg gtgggccagc aagggccgca gcgccggcgc cgcggcggac agcccctccg 300

<210> 444
<211> 77
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011d04b1

<400> 444

gtcatccagt gttagtggag tggaatgata ctttttacta ggtgtggagt gggagtgcta 60

tgcgcggtgt cgcgtga 77

<210> 445
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011d06b1

<400> 445

ccaccaccgc cgtccccacc ttctccgacg aaaccctagc gatggcgttc cgcggcgcag 60

cctcccgctc cttcctcgcc gccgtccgcg gtcgcaccgc ctccactgcc ccgcgcggac 120

gcgcggtccc cattcccgcg gcccctcccc gtcgcatccc tgcctcagcg ccctcctccc 180

ctctcgccgc cgcaaggcca ttggcggcgt tgatggggtc gccggtgttg gttgccgcaa 240

ggctgacggg gcactgcgcg gcgagcgcgc gggcgtgctg tgagctctcc cagggtactt 300

aaaggacgag ttgctgccct tcgcaaggat acaacagttc ttttgggtgc atctctttgg 360

aagctcttct gagttcagtt cgttttcctg gattctgcaa agttacaaga aactccccac 420

tcccagtgct agcttttgtc tcctagacaa acggacattc tacttgat 468

<210> 446
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011d09b1

<400> 446

tcgcccacgc gtccttccac gcgtccgccc acgcgtccgg ggagctccgg cgggttcgtg 60

acggacgggg agacc 75

<210> 447
<211> 91
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011d10b1

<400> 447

tgattatccc tttttcgacg acctccccca tgagatccag cagcctgcgt ggcgcagaga 60

atcggttctt ttttcaggtt ggacacgacc g 91

<210> 448
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011d12b1

<400> 448

cttattttga gcacttggcc atggcgttca acggcgccca gatgctcgct gccttcaccc 60

tgggcattct cctcatggcc ttctgtgcgg aggctcgggt atgcatgtcc cctagcaagt 120

ggtacaaagg ggacccttgc aagaacctgc gttgcaccaa ggcttgtcac aaagaacact 180

tcaagggtgg gttttgctcc agtaaaaagt cgatcgttga tgacgagctc aatgaagaca 240

atggcgacaa cagctttggc aaacggccta agaaaaaatc gaaaaaattg tgcatgtgta 300

cattcccatg cggtcaaacc ccaccaccac c 331

<210> 449
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011e02b1

<400> 449

gctgtacgca cgccatggcc gccaccgcgt ccctgtctgc cgtcgcggcg cccctgtccg 60

tcgccgggct caagaaggcc acgtcgttcc ggcccctgcc ggtggtcagg gcccggaggc 120

ccgcggcgag gatgacggtc gtccgggcgt ccttcgcgtc cgtgcaggag aagctcacgg 180

ccgggctgac cgcggcggcc gtggcggcgg cgctggtgct gcccgaggtc gcggaggccg 240

cgtccccggg gctgtccccg tcgctcaaga acttcctgct cagcatcgtg tccggcgggg 300

tcgtcttcgc cggcatcgcc ggggcagtcg tcgccgtctt caacttcgac cccgtcaaga 360

ggacctgatc gcctcgccgg attctca 387

<210> 450
<211> 87
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011e03b1

<400> 450

tcgcccacgc gtgcgcccac gcgtccgccc acgcgtccgc ccacgcgtcc gcccacgcgt 60

tcgcccacgc gtccgcccac gcgtccg 87

<210> 451
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011e04b1

<400> 451

tcggagaact tcagcgacac ggtcaccgcc gtcgtcgtgc cgccgtacat cgacagctcc 60

gagatcgtga agcacgcgtg gaagcggtac aacctcagcc tcgggctcgg gctgaacaaa 120

ggtcgcccgg caaggtcttc aggatcggcc acctcggcca cctcaacgag ctgcaacttc 180

tgggctgcct cggcggggtg gagatggtgc tcaaggacat cgggtacccg gtgaagctcg 240

gcagcggcgt 250

<210> 452
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011e05b1

<400> 452

tcgcgacgac acggcggagc tcaaggacgt gctgggcgac gggtacctgg agcgcgtgca 60

ggggcgcggg ctggtgacca aggagtgggt ggaccaggag gcggtcctgc ggcacccggc 120

cgtggggctg tacctgagcc actgcgggtg gaactcggtg acggagtcgg cggcgtacgg 180

cgtgccgatg ctggcgtggc cgacgctggg cgaccagcgg ctgatcgcca aggtgataaa 240

gagcggcggg ttcgggctgt gggtggagca ctggagctgg gacggcgggg agggctcgct 300

ggtccgcggc gcggagattg cggagaaggt gaaggaggtg atgggc 346

<210> 453
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011e06b1

<400> 453

tcgcgcgaag gtaatgaaat tatccgagca gcttgcaaat ggagtcctga actagccgca 60

gcttgtgaag tatggaaggc gatcaaattc gagttcgagc cggtagatac tattgataag 120

tagattaaac taatgataaa gaagagaagg tgtttcttt 159

<210> 454
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189011e09b1

<400> 454

cggacgcgtg ggcggacgcg tgggtgaaga tcacctttga tatcagaaaa cagcctggaa 60

agccgcaaga gactaccatc catgccactt ttacaaattt gacatctagc aattatacag 120

atttcatttt caggcagctg ttccaaagtt cattcaattg cgactggatc cagctagcgg 180

taacattgtt ccagccaatg gaaagggttc agtcacacaa ggtttcagtg tcacgaataa 240

tcagcatggg cagaaaccgc ttgcaatgcg tatccggatg tcttacaaag tgaacggcga 300

ggacaggttg gaacaaggcc aagtcagcaa ttttccacct ggagtatagt gccatttgtg 360

tgtaacctat gttt 374

<210> 455
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011e11b1

<400> 455

gcgatacatc catatctatc gccgccaaga atcgccgaga aatccaggag agccagtagc 60

tagcaatggc gtctgtgggg ttcggcagca gcgtggcggc cgtggcgccg gcgtcgtcta 120

cggcggggag gacgagcctt cgcccgcagc ggacgctgct ggcggtgccg gcggcgacga 180

ggggcacgcc ggctccggcc aagaaggaga agagcatcct ggacttcatc gtcagcgcca 240

tcgtcaagga cgagcaggag ttcatcgaga ccaacc 276

<210> 456
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011e12b1

<400> 456

gcggcctcct cctagcaagc tatataccta catagcacag ccatggcccc caccgtgatg 60

gcctcgtcgg ccacctccgt cgctcctttc caggggctca agtccaccgc cggcctcccc 120

gtcagccgcc gctccaacgg cgctagcctc ggcagcgtca gcaacggtgg aaggatcagg 180

tgcatgcagg tgtggcccat cgagggcatc aagaagttcg agaccctgtc ctacctgcca 240

ccgctcagca cggaggccct cctcaagcag gtggactacc tgatccgctc caaatgggtg 300

ccttgcctcg agttcagcaa ggttgggttc atcttccgtg agcac 345

<210> 457
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f01b1

<400> 457

tcgcggactc atgggcggac gcgtgggcgg acgcatgggc tggcggtggc ctgggtggtg 60

tcccaaatgt tccaactgtg ccaccggaag agcgctacgc gacgcagcta gctcagcttc 120

cagaaatggg tttctttgac ccacaggaga acatccgggc gctgctggct accaatggga 180

atgtccatgc cgcggtggag cggcttcttg ggaactttgg gcaatagtag actatatatg 240

cagggccagt cacctgtagt agttggcatt gtgaggcttg attggctgta taccctaccc 300

ggtcccggtg agattgaaag gcagcgtctc tagattctat gtgttttaag atggatgaat 360

aaaccagtct ctctgctggc tatcctttgc agcttgcatg gataca 406

<210> 458
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f02b1

<400> 458

aaattaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaggg gcg 83

<210> 459
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f04b1

<400> 459

tcggcgactt acatttatga acggagggag tattaaatat ggagctgcca accccatcaa 60

gcagaagatt tgctttttg gggctggcac ctacaacaag cataaaaat 109

<210> 460
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f05b1

<400> 460

gccaggtgtt ataccggtag cttcaggtgg tattcatgtt tggcatatgc cagctctgac 60

cgaaatcttt ggggacgatt ctgtattaca atttggtgga ggaactttag gacatccttg 120

gggaaatgca cctggtgcag cagctaatcg agtggcttta gaagcctgtg tacaagctcg 180

taacgaaggg cgcgatcttg ctcgcgaagg taatgaaatt atccgagcag cttgcaaatg 240

gagtcctgaa ctagccgcag cttgtgaagt atggaaggcg atcaaattcg agttcgagcc 300

ggtagatact attgataagt agataaaact aaagataaag aagagaaggt at 352

<210> 461
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f06b1

<400> 461

tcgctggaaa tcaaggaaac cgatgcagaa atctggaaaa gatcattctc ttctgttgat 60

ccttccttct ggagtttatc gttatagatt tgttgtagat ggagagagga gatgttttcc 120

tgaccttcca tgtgaaactg atgccatggg caatgctgtt aacctacttg atgttcatga 180

ttttgttcct gaaagtgttg aaagtgtatc agaatttgag gctcctccat ccccagaatc 240

tagctacagt ttccagtcac ccgaggaaaa ggactttgcg aaggagccac ctgctcttcc 300

gtctcagctt cacctcggcg ttcttaactt acagaactcg gaggaaatat gtgcacggcc 360

ccaacacatt cgtctcaacc acctttt 387

<210> 462
<211> 282
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f07b1

<400> 462

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ggttcagtga gtgatcgagg tcgttgcttt ggtcttctgc cattcgctgc cccgttttag 120

tttctgcact gcagagctga gagttcagaa taaactttgt gaggaacaca tgcatggatt 180

agtgtgcttc gattgctttt ttatgattgt aatttcggtg tgtgctttgt ataagaagtt 240

attgtggatc aagtaattta atcaagtcca tttgtgttag tg 282

<210> 463
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f08b1

<400> 463

accacaccct gcaatggcgt ccgcgctcac caacgtgagc ctgtctacct tcgcgcccac 60

ggccaggggc gacgtcctgg cgaggccgca ggtggccccc gcccgcgtca ccttcccgac 120

ggcgtaccgc ggcagcggcg ccctctcctg cagggcgggc gggccggcca cgccgccggg 180

catctccgac aagatgtcgg acagcatcaa ggaggcccag gagacgtgct cggaggacgc 240

cgccagcggg gagtgcgccg cggcgtggga cgaggtggag gagctcagcg ccgcggccag 300

ccacgcccgg gacaagctca aggactcgga cccgctcgag aactactgca aggagaaccc 360

cgagaccgac gagtgccgca cctacgacag ctgagcgtac gtgctaattt gttctgga 418

<210> 464
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f09b1

<400> 464

tcggtgaata cagatgtgga ttcggtggct tcagacttca tcaagcgtaa gcacatgtct 60

tgggcactcc agaagagcac aactatgtat ccatcttctt aagagaacca aggttcctta 120

gtcatggtat tatctgttca tgcttcgtcc agcatgaaag ttcaaataag aggtgctgct 180

tggaggtgct ctagatatcc tgaggttatg ctactatggt gttcttattt gtaacatgaa 240

taagagtgat gtgaaatagg ctgtactgtt attcactgct gtatgatatt cttatatatg 300

aaatgaaagt gtggttatta caaa 324

<210> 465
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f10b1

<400> 465

gcgcgagaac cagatcggag cgctacccac cggagatgaa gttcttctcg gcgttcgacc 60

cgtggccggt gttcttccgc cgggagtggg gccgcacctg gcccttcctc gccggcttcg 120

ccgtcacggg ggccctcatc accaagatga ccgccggctt caccgaggag gacctcaaga 180

actccaagtt cgtccaggcg cacaagaagt agtcaccgcc cgcccggtcc gtccgtcgcc 240

aggtcacagg ggcagcagct gagtaaccgg catgtgtcct tgatgcggcg agccagtcct 300

caccctcact attgtgattg agcttttatg tttttctttt caaatccaac tgcatgcatt 360

tttgctgctc tggtttgtaa tgtaataagc gacatttgaa tcgttgaatc caagaaaaaa 420

acagcttcgg at 432

<210> 466
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011f11b1

<400> 466

gcgcccacgc gtccgcgatg atgacgatga gttgaagcgg gttcctgcgg tccgactcca 60

gcaggcctac ggatatagta gtaactggta gctaacctaa cttggcgcgt aatgccatga 120

gctatatcat gttccttgtt atatgcaatt agagactttc aacatgtaga tttgcttcca 180

agacttctgt catagaagag tacctttcct gttatcccac ggtaccttct tgaattaatg 240

aatccacggt accttcttga attaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaataa 300

aaa 303

<210> 467
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g01b1

<400> 467

tcgggggtcg tcgctcatgc agctgccggc agggaactgc cgtgtcgacc cccggtgcga 60

cccgccgggc ggcatggact gctcggcgca cgccgtggag ttcgattcaa cactggcgcg 120

gtccggtctt ttaagatctt aaccgattcg tggtgctcgt cgggagcgtt cgacgtggac 180

ggtatgctgg tgcaaacggg cggctacttc gaaggggtga aggttgtgag acgcctgaac 240

ccacaaggaa atgccgactg ggtcgagttt cccaatacct tggccgaagg aagatggta 299

<210> 468
<211> 218
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g02b1

<400> 468

gagggttccg ttactaacat gtttacttcc attgtaggta acgtatttgg tttcaaagcc 60

ctacgtgctc tacgtttgga ggatctacga attcccccta cttattcaaa aactttccaa 120

ggcccgcctc atggtatcca agttgaaaga gataagttga acaagtatgg tcgtccttta 180

ttgggatgta ctattaaacc aaaattggga ttatccgc 218

<210> 469
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g07b1

<400> 469

cccacgcgtc cgcattacca ctcctccccc aatccaactc gcgcagcagc tccaagagga 60

tcgtcagcga ccatgtccgg gcgcggcaag ggcggcaagg ggctcggcaa gggcggcgcc 120

aagcgccacc ggaaggtgct gcgcgacaac atccagggca tcaccaagcc ggccatccgg 180

aggctcgctc ggaggggcgg cgtgaagcgc atctcggggc tcatctacga ggagacccgc 240

ggcgtgctca agatcttcct cgagaacgtc atccgcgacg ccgtcaccta caccgagcac 300

gcccgccgca agaccgtcac cgccatggac gtcgtctacg ccctcaagcg ccagggccgc 360

accctcta 368

<210> 470
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g08b1

<400> 470

cccacgcgtc cgggctgggg aagagcggag tggaggaagt gatggggctg ggcgagctgt 60

cggccttgga gaaggagggg ctggagagcc tcaagggcga gctgctgtct tccatcgaga 120

agggtgtcaa gttcgcgcag gagagctagg tgtcaagttc gaacggttca cacttgaact 180

catgcaattt ttgttcggcc gctttttttgt tgcctccaaa cccggttgtg ctgcggggca 240

tcgtggcgtc gtcgtgctcc acaataaaat gtactggctt tgatgtcgcc agactgaact 300

gaacctgtag tatcagaaaa tgcagacacc ggtgcctatg tgtttacagc 350

<210> 471
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g10b1

<400> 471

cggacgcgtg ggcggacgcg tgggggcggg actacccgct gagtttaagc atataaataa 60

gcggaggaga agaaacttac aaggaaacca ttttccaaat tattctctag gacctcttca 120

ttattggggc taccaatagg cctgaccttc ttgattctgc acttctccgc cctggccgat 180

ttgataagct tctctacatt ggtgtaaata ctgaagcatc atacagggaa aggatactga 240

aagcacagac tcgcaagtac aaactacacg agaatgtatc tctcttgtcg attgctcagc 300

actgtcctcc aaacttcact ggtgccgata tttatgcatt atgcgcggat gcatggtttc 360

atgctgctaa gcgttccgtc aaaacgcttg aagctgatcc t 401

<210> 472
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011g11b1

<400> 472

aagcgcccga tgtttactac tgcctcaagc ttctggaagc cactggaatt tccactgttc 60

caggctcagg ttttggtcag aaagaagggg tgttccatct gaggacgacg atcctgcccg 120

cggaggagga catgccggcg atcatgtcga gcttcaagaa gttcaacgac tcgttcatgg 180

agcaatacca ggaccactcg aggctgtgaa gagagaagaa gacaaccgca tctacatata 240

atacaatgct gctcttttct accagcaatt aaagttgatt aattagctgt aagctgtaac 300

tatggtgaag aaaactggtt gctatgcttg atatgtatag gggggaagat atatgcggaa 360

atattcggtc catttactac ataatatgat gatact 396

<210> 473
<211> 209
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h01b1

<400> 473

ggagatgtca agtgtcctca ggaagatgag gtctggtggt ggtggtgccg cggacaagaa 60

gaaatagatt ttgcatgttg gtgaaattct atttatctca acgctttgcc ccgtattttc 120

atattatgcc aagtttgtag cctgtggcaa ttggatacga atgtagcaca ttgcacttca 180

agttcagagt aaaactatga atttttgac 209

<210> 474
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h02b1

<400> 474

ctacgtactc tttcccactt agctagctag cagccatggc cgccctctcc tctgcagccg 60

tgtccgtccc ttccttcgcc gccggcgcca aggtggccgc tccccggagc agcaggaagg 120

tggtgcgcgc gtccctgggc aagaaggccg ccagcgcggc cgtggccatg gccgcgagcg 180

cgatgctgct gggcgggtcg gcgatggcgc aggacgtgct cctgggcgcc aacggcggcg 240

tgctggtgtt cgagcccaac gacttcagcg tcaaggacgg cgagaccatc accttcaaga 300

acaacgccgg gtacccgcac aacgtggtgt tcgacgagga cacggtgccc tccggcgtcg 360

a 361

<210> 475
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h04b1

<400> 475

tcgggtctat gtcatccctg caaatgatgc caatgttgat tgatactgtt aatgcttttg 60

tgttggtgat agtgctttca tttgttgttg gttagtgaat cgttggtgag ggcagtagtg 120

atgttgtgtt agttagtgaa ttgtctgtga agttttctgc ttttcttaca aggataactg 180

attccttgtt aattagttga ctactactta actcgcataa tgaggaatga tgcatacttt 240

tgatgcaaga ctgaataaat aatgtaattg tgttgtgtcg aatttatgtt cattggattt 300

tggactcct 309

<210> 476
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h06b1

<400> 476

tcggattata tggacacatc tgctggaatt gaggaggagt atcaccacaa aaataatcgt 60

gtttattgct ggaaaggttt acggtttcaa gccagacaag atctggaagg attttcttga 120

ttttgtgact acgggatcga aggtgttgta cctcccgagc tgttgccacc cgacgtccgc 180

gccaaattca attctaagcc aggcgagaag gccaaacggt ctaaacggga agacacaaga 240

ggcacttcag ctcaccccaa ggagccacag gttgccgcgg ccacgcccga gacagacggc 300

ggcg 304

<210> 477
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h07b1

<400> 477

aggtgaagag catagtgaag cctgggtgct cgcaggatgt tctcaaggcg gcgctgagtg 60

ccatgtcttc cgtgacggag acactggcta tcatgacttc ctcttccact ggccagcccc 120

cactctgagg gccaagcacc acttcagtgg gttacgaatc tactacgcgt tttctgattc 180

tcttttgctc catctgactg ttgggattcg agacagtgat cttgtcatcc catgggttat 240

tcttttccta gctttttgga gagttttatt atcatttttg gctctgatag cgtatgcggg 300

tgtgctgttg gcgagattca gcttgaataa ttttgatcaa actgtcggct gtgatctatt 360

aataatctaa attttgagag ggtccatctc tagcgctctc tttgattcat agga 414

<210> 478
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h08b1

<400> 478

cccacgcgtc cgttttttttt tttttaaaca tataacgaag actttatatc aaaatccaac 60

gcacagccac atgatagatt cacattaata aaggttccca aacgtcacca tcgaacatct 120

tacgaatgat aaaggagcat atttcaggta gcatatccta acaggactgg tgatattaaa 180

aaactaggat agcaagagca gtatggcaac cggcagatcc accgagctta atcgatctcc 240

tggagcgagg cgccggtggc cgtggcaccc ccagcggcgg cggtgacgtc ctcggccgtg 300

aacttgccct tggccttgtc agcagc 326

<210> 479
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189011h11b1

<400> 479

gccgaggctt ttttttggag gacagatggt gatgagtgtt cagtcaagcc tgcgccgtat 60

gctaagcctg tggttactga attaagctag agatttccgt ccattttctt gttccgaggg 120

tggatctgga tctcattacc cgtatgctat tactttgtgt ttgacggttt gacctgagta 180

cttggttata ttacagtttt gg 202

<210> 480
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a01b1

<400> 480

gcgcccacgc gtgcgcgcta gccaagcaag acccgagcaa gccacactct ccagcaccag 60

cagaggccgg cggcaaagca gcgcagcaca gcaacaaatg gccaccatca gcgccgccgc 120

ggcgaccacc gtcggcgccc gtgccgcgat cgccaggcca caggccctag gtctgcccca 180

gctgaggacg aggagcgaga gggtgaggtg cagctactcc aaggacgcca aggaggcgac 240

ccctgccgcc accgtgcgcg gggccagcgc gtccctgct 279

<210> 481
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a02b1

<400> 481

agcgtgataa aatactgatt ctttttctag aagattaata aacaaatttc tcaggttgtc 60

ctaatttttc aaaaaaattg gagttgcaga agtattcgag agttacagat tactacagac 120

tgttttgttt ttgacagatt ctgttttcga tgcatagttt gtttgtctta tagtttatat 180

ggcttatatt gcttaatata aattgtagaa ttgatagggt acagtaggca tcatgtgcga 240

aaaattatga atcttatctt gacagtacct aagtggtgat ttgctttatt atactaacgg 300

agcttacgag ttttctgtta agttttgtgt tgtgaagttt caagttttgg gtaaagtttt 360

gatggacta 369

<210> 482
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a03b1

<400> 482

cgcacgctcg ctgactacaa catccagaag gagtccaccc tccacctggt tctcaggctt 60

cgtggtggca tgcagatctt cgtcaagacc ctcactggca agaccatcac cctggaggtt 120

gagtcctcag acaccattga caatgtgaag gccaagatcc aggacaagga gggcattccc 180

ccggaccagc agcgtctcat ctttgctggc aagcagcttg aggatggccg cacccttgcg 240

gattacaaca tccagaagga gtccaccctg caccttgtcc tccgccttcg tggaggcatg 300

caaatctttg tcaagaccct cactggcaag actatcacct tggaggtgga gtcatctgac 360

accatcgaca acgtgaaggc caagatccag gacaaggagg gcatcccccc ggac 414

<210> 483
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a04b1

<400> 483

gctacgcaaa tacctgaggc atgagcagag gaagagcctg agaagattca tctcattcgt 60

ccatggcaag gatccaccaa agaacgacga gaggcggtcc atgagcctgc ttggaagctc 120

gacgccggca acgccgatga gcagccttac tacccttgag atagaaaggc cggccatgga 180

agtcagaaac accagcgtta ttgaaatgga aagctagttc atgtgtacaa agctagttcg 240

tgctttatct cccaaagcag cggggcaact gttttgtgtg aagcaacaat gcggccgact 300

aacctaggtc ccggtaacct aggttggaaa gccaaacacc agggatgtat agagggggtt 360

caaatacttc ttaaaggaag ggttgataat 390

<210> 484
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a05b1

<400> 484

gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaagg ggcgg 75

<210> 485
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a07b1

<400> 485

ctctgatttt ggcactcaag gagctgattc taacaacatt ctgtacctaa gggaaattga 60

cgacgcggac aatctgtatg cagctatcca agcaaagaag ggtggaaagg cagtggttgt 120

tggaggaggt tacattggcc ttgaactaag cgcagtattg aagatgaacg atcttgatgt 180

gactatggtg ttccctgaac cttggtgcat gcctcgtctc ttcactgccg agattgcagc 240

tttctacgag agttactata ccaacaaagg agtcaagatc gtgaagggta cagttgctat 300

tggttttgat gctgacgcca atggtgatgt gacc 334

<210> 486
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a08b1

<400> 486

accttctctc ctccaacacc atggcccccа ctgtgatggc ttcctcggcc acctccgtcg 60

cacccttcca gggtctcaag tcgaccgccg gcctgcccgt cagccgccgc tccagcagcg 120

ccggcctcag cagcgtcagc aacggcggaa ggatcaggtg catgcaggtg tggccgattg 180

agggcatcaa gaagttcgag actctgtctt acttgccacc cctctccacg gaggccctcc 240

tgaagcaggt cgactacttg atccgctcca agtgggtgcc ctgcctcgag ttcagcaagg 300

ttggcttcgt tttccgtgag cacaacagct cccccgggta ctacgatggt cgatactgga 360

ca 362

<210> 487
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a09b1

<400> 487

caacaacaac aacaaccgtt gagccaggtc tccttccaac agcctcaaca acaatatcca 60

tcaggccagg gctccttcca gccatctcag caaaacccac aggcccaggg ctctgtccag 120

cctcaacaac tgccccagtt tgaggaaata aggaacctag cgctagagac gctacctgca 180

atgtgcaatg tctatatccc tccatattgc accattgctc cagttggctt cttcggtact 240

aactgagaag agaagaactc tagtagtaga catatgatac accgttttct tagtccatgg 300

tttggtcgtt gtagcggtga aaaaataaag tgacatgcag tatcatgtaa gaacccgaac 360

tatactagtt caaacatggg aataaaagac aaacacatgt cttgtctaca t 411

<210> 488
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a10b1

<400> 488

attgggtagt tcgtcttctt ttgccatctg aggatctgct agactctgat gctgccttca 60

tcataccgca tcattcgttt cgttccacaa ttttgagagc tcagttcgtt aatagcttag 120

caaggttttg ttcgcaaatt ttgttcttgc cagatacggt ttatatcctt tttatgtctt 180

gtcttaatac acctgcatcg ttcaggtgtc cctagtagag atgatcagag gacgacttgt 240

gtccatctca ttcattacga atatttgccc ttcc 274

<210> 489
<211> 79
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012a11b1

<400> 489

ctgggattgg ctttgggcct ttcctgcgca gcttaggtgg aaggcgaaga aggccccctt 60

ccgggggggc ccgagccat 79

<210> 490
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012a12b1

<400> 490

cggtttgatc aaggcacgag gaagaatatt caaatgatca tgggcccaaa tgttttctgc 60

tggctttgcc ccaccgcgac aggacatctt aaggatggca ccgagttcca gaatacgaac 120

aactgatcag agacgaagaa cagcattgct gcataaacac aacatgtaga cgtgggaatt 180

tatctgctga ccagattgat catttctgcc attgcgttgt tgtcacccag gcagaggtga 240

agagctcggg cagtttcaca atcttgtaaa tcatgtaaac ctcacctgaa attatatgtg 300

tgtgtatgct gtaaagtagt ttgggttttg agtactgttg tgtactgact gagtcattca 360

attgcaaatg taaccagaat atgtttgtca ccatttgagg tgtgaaaaag ggaatggaaa 420

ttggatatat g 431

<210> 491
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012b02b1

<400> 491

tccatggcga atgttcacag acagctgtag gaggatgagg atcatgaagg ggtcagatgc 60

agtgggcctc gctccgaggg ccgccgagaa gagtaagaac cagaagtagc aagaacgatg 120

aacccgatct gtttcctttc ctgcgatcgc atcttacaag ggtgatggac tttatgtgtg 180

atgagaaagg gatttactta tatatataac ctacgtgtat tctctttgtt atttccttgt 240

atgttcgttc ggaacaagca tgttagattg tgtaagctga tgtgtgtgta tctactacta 300

ctgcactact ttgatttgat tcgcgtgtgt tgtatgcggt ttccgttgta aattggtgtg 360

ctctgtctgt accgcaaact cttttctttc 390

<210> 492
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012b04b1

<400> 492

tcggttcaag ggtgcataca accagttgag gaagcacgct agggaggatc atcctgctgt 60

ccgaccaatg gaggtggacc ccaatcgaca gcgagactgg cataggatgg agcagcagcg 120

tgatcttggg gatttgttca gcatgctgcg ttcggggatc agtggcagag aagatggggt 180

tggagtcaga gaaagtgacc agggcgtgag tgagagatcc ttgcacgcca cgtccata 238

<210> 493
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012b05b1

<400> 493

gagctaccga ggtgccgatg tcttcctgct cgccttttct cttatcagca aagcaagcta 60

cgagaatgtc actaagaagg caacccatct cctttgatcc tctctgtttc cttgctccca 120

ctctcgttga cttgttgtag tttcataaat tgtttgttat cttgcttatg agatatgaca 180

tgtgcttgta attttccagt ggatccctga gctacggcac tatgctcctg gtgtgcccat 240

aattcttgtc gggacaaagc ttgatctgcg ggatgaccag cagtttttcg tggatcaccc 300

tggggctgtt cctatttcca ccgctcaggg tgaagagctg aagaaggtaa ttggcgcgac 360

ggcctacatc gagtgcagct caaaaacaca gcagaaca 398

<210> 494
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012b08b1

<400> 494

cccacgcgtc cgtccacgcg tccgctttgt acaatgaaag cataattggc catcggtctc 60

agttgtagtt tgtcgatc 78

<210> 495
<211> 156
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012b09b1

<400> 495

tgcgggcaga aggggaactg cgtgggcgac gtcgtcggcg gcgtcgtccc agggacgggg 60

cagggcggca cgcactgcgg gcccgtgcac aggcacaccg tgccgttgcc gccgtccgcc 120

agcgcgccgg cggccgacag gaacagccac agccac 156

<210> 496
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012b10b1

<400> 496

ggcaatgtaa cttccctgtt gataatatgt caacaagcac taagtatgat tctatattga 60

gtctttcaca ggtg 74

<210> 497
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012b11b1

<400> 497

ggagacctga tgcggttatg agtacgaccg ggcgtgaacg gtactcggtc ctccggattt 60

tcatgggccg ccgggggcgc accggacacc gcgcgacgtg cggtgctctt ccggccactg 120

gaccctacct ccggctgaac cgtttccagg gttggcaggc cgttaagcag aaaagataac 180

tcttcccgag gcccccgccg gcgtctccgg acttcctaac gtcgccgtca accgccacat 240

cccggctcgg gaaatcttaa cccgattccc tttcgggggа tgcgcgtgat cgcgctatct 300

gccggggtta ccccgtccct taggatcggc ttacccatgt gcaagtgccg ttcacatgga 360

acctttc 367

<210> 498
<211> 267
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012b12b1

<400> 498

gccacccgac cggccggcga cgatgccgat gctcatcccc gacgacgttc gcgccaaggc 60

ggagatctac accggcgacg cggcggggca ggagaagacg cggctgatgc tggcggagac 120

ggagctcccc agcggcctcc tgccgctcaa ggacatcatc gagtgcgggt acgtggagga 180

gactggcttc gtgtggctca agcagaagaa gcgggtggac cactacttcg ccaaggccgg 240

ccgccatgtc ttctacgcca ccgaggt 267

<210> 499
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012c01b1

<400> 499

cggacgcgtg ggcggacgcg tgggcgcggc gggcgcgagg gaccaccacc accaccaaca 60

ggacgaggac ggggccggcg gcgggtactc tctgttcgcg ccggggccgt acgggcagtt 120

cggcaccgac cagtcgttcg cgttcgccgg ggccgggcag cacggcggcg tctcgctcac 180

gctcggcctc ccccacggcg ccggcgacca gacggcgttc ctcatgggag gcggcagcag 240

caacggcgcc gacagcggtg gcagcggcgc cgccggctac gacatgaaca tgcagaccac 300

caagtccttc gcggctcagc tcatgagaga cttcgtggca tagtatgaat atcaccacta 360

ttacatagcg caatccatta atcaaatccc aaaaaaaaat cggttaatca atcaatttag 420

ggcttgtata gaaaataaaa 440

<210> 500
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012c04b1

<400> 500

gcattaccaa taaggcatga caaagcggcc atcgttgatt gttgcaaata aaatagatga 60

agtgggagct gacgagatgt atgaagaact gaagaggaga gtgcaaggtg ttccgatatt 120

tccagtgtgc gccatcttgc aagagggagt acctgatctg agagttggcc tgagagacct 180

tatggatgcc tcggatccgc aaggtgtcga tttgagcaaa gttattgtag actaaaaggc 240

tttgcccctc gttggagaag aattgttctc caatttttc cccttgagca ctgtctgctt 300

acagatgcac tgtagacccg tgttgcaaaa attgctctaa ttttctgtgt tgcagaatag 360

atcatccatt gtattagaaa attcagtgta ataataacta agggtaacca gtatgtatgc 420

tttggtcttt gata 434

<210> 501
<211> 214
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012c05b1

<400> 501

cccacgcgtc cggccccact tagtcccaac tagtaggata gtttatggag gattagattt 60

ccttgcggac tgtaccccaa caaggttagg aaatggacag aatgttgtgt aaattgtgct 120

tgacatgtac tgtaggtagg taggtaggta catacgtact ataaggcttg ttgtatcgac 180

cttccttgtt tagcttgaag agtctttcct tttc 214

<210> 502
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012c06b1

<400> 502

gcggagagcc tatttggacg ccttacaatc gtgcccatga ccatctccca gctagaaagg 60

agtatgtcga caagattatc aacagaggtg ggaaccaaac cgtcgaagct cgttgatggc 120

tcctacagtg ttcggcagcg agtgagtctt ctgtatgtat ctacatatca caccaaaagg 180

ttaccgaata agatgtgtga ttggctttcg ccgtgtaccc ataccagcat cgatcctgta 240

tcacttgtgt ggtagtttgc acaaaacctg cttgaaaatg tttcatggaa acttctttgc 300

ctggcgatga tgcctgtatt gaataataaa tgattcagtg tcaacaacgg cgtaatgaaa 360

ac 362

<210> 503
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012c07b1

<400> 503

gtttgttgct atggctgtgg aagctgttta acctgtgtta tgtccaattt agctgtttaa 60

ttctagtctg gttatgttcc aagacagagt tttatgtaat gtggggatta tatgtgtttg 120

tgactgaatt ttatgcacct attaattttg cggcgtctc 159

<210> 504
<211> 139
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012c08b1

<400> 504

cccacgcgtc cgtggacgcg tggggtgaaa caaagcaagc ggtactgcag ctttttttc 60

acctgtacga ttattcatcc gatgaggtca tgtaacagta tttgattggt ttatcgaaca 120

agaatgatgg taaacttcc 139

<210> 505
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012c10b1

<400> 505

cccacgcgtc cggccacgcg tgcggctccc atcgagagaa ctgaggcgtc tcttgcttca 60

gaatctcata atcaagtgca agctgctcca tttgcatctc aagatcctca cggtctttct 120

tgtacagctc gatctcatca ctcagttcaa gaatcttctc ttgtagttca gaactagcga 180

cgccatcact cttcttcacc aatgcatcca acataagctc gtcttctttc tcttggtacg 240

agcttgtttc agacatgtcc atcttgtgtc cagcactgtg cacatttgac agtgcatgct 300

catattctgc ctcctgggga tcctctactg tttcttcttg caaaatggac atatctctat 360

tcttctgctc gagcatttca tcaagatcct tcacagccag aagcagctca gagttggact 420

cctgcatttt c 431

<210> 506
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012c11b1

<400> 506

aaatttaaaa atttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaa 63

<210> 507
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012c12b1

<400> 507

atcgtgggat atgtttccct ggtttggaga atataggcgc aaatttgttt gtaacatttt 60

cttcgcctga atggttggat aattgaatag tttgttgtac tacgatctgt ggactccttt 120

cgtccgaagt attgaatcat atgcttaaaa aataaaa 157

<210> 508
<211> 246
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189012d04b1

<400> 508

cccacgcgtg cgctaaggca ttcctatggt tttgttctat gagatgttta ttcctatggt 60

cctttacata ggcaattgga tgattagtac tgtcagcatt gtttagcttg ccttgctcct 120

ccagcgaaac gccacacatt gttttttttt ccccgcaaag aaagggaact aggacaacct 180

gtgttgctaa actgaagaat tgcgtgaaac tggctggttg atgcttgtgc aatctttgct 240

ttcgng 246

<210> 509
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012d05b1

<400> 509

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actatgagta tgttctagac tgaaatgtaa tgttggaacc tgcgaggatt ctgtgttatt 120

tcacttgctg gagaatggag atatgttacc ttatatattc tataatttga ttggattgtg 180

cac 183

<210> 510
<211> 284
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012d06b1

<400> 510

catttctgaa gatgggaaga actgaaggca atgaacatct attttctcgg aaaagtgcag 60

gcgcatgaaa tgaagaagat tgcctgcatt agctgctttt acactcgggc tctatgaatt 120

tacttaatcc tcttgtaact gctttgatga caactggcga gagaacttgt attatgtctg 180

ctctcacgaa tgctccttca tgtttgtctt aagtgagtac atgttgcaaa ttcatttgta 240

cactttatgt ctgttgaagg tgaaattgaa cacattgaca gctt 284

<210> 511
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012d08b1

<400> 511

gacggtgcag gtgaccgaca agggcgccga cggcggcggc gcggtggtga actggaccat 60

ggacttcgac aaggccagcg acgaggtgcc cgagccggac gtcatcaagg agaccgccgc 120

caagaccctc cacgaccttg acgactacct tctcaagaac tagagtagct tttactagct 180

gcctcgtcgc tggccgccgc gtccgtcgtc cgtccatcca tccatccatg tctactgtca 240

tcgttacttg ctgtctgccg tgttccccca tctagcttac tctcacgaaa acgaccgtgt 300

gtaccatgta cgtgtgcatc tgcctgcgct gggacggacg cgtgagtagt agtggactga 360

taataaagtc ccaactttat ggtcacgtat acgtacgaat ggtgttagat ttgtgtgact 420

tggtttgatt cgatctgcaa gaaaaattta gtatgttgtg gcgg 464

<210> 512
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012d09b1

<400> 512

cccacgcgtc cggcccacgg tctaatccga ttcaaacgca ccgcttcctc gtgtccgaac 60

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gccaatggca acggcgccac cacgcgcccg ccgcccactc cctcccccat ccgcttctcc 180

aagttcttcc aggccaacat gcggatcctg gtgaccggcg gagctggctt catcggctcg 240

cacctcgtcg acaagctcat ggagaacgag aagaacgagg tcattgttgc tgacaacttt 300

ttcactgggt caaaagacaa cctgaagaag tggatcggac acccaagatt tgaactcatc 360

cgtcacgatg tcaccgaacc act 383

<210> 513
<211> 188
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012d10b1

<400> 513

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acgagctatc tagttttgtg acgtgagttc acactttgta gagcttgaga cagtagcaca 120

tatcctgtcg ataccagttt tagcccttcg ttgtgttgtt cggatgctta atgctatggt 180

tttggacc 188

<210> 514
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012d11b1

<400> 514

ctcctcccct ttcggttcgg gttctggttc ggttcgggtt cggttcgaga gagaggccga 60

gtagctagcc tagtctaggg tttcggtaga gaggaagtga gatccatggc ggagacggag 120

taccgctgct tcgtgggcgg cctcgcctgg gccaccgacg acaacaacct ccagcaggcc 180

ttcagccagt acggcgagat cctcgacgcc aagatcatca acgaccgcga gacggggagg 240

tcccgtgggt tcggcttcgt cacgttcggc agcgaggagt cgatgcgcca ggccatcgag 300

gagatgaacg gcaaggagct cgacgggcgc 330

<210> 515
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012d12b1

<400> 515

cccacgcgtc cgcccacgcg tccgcccacg cgtccgaccg gcgaggccgc gtcgccgaag 60

aatacacgga ggaggtggcc cgggtcggcg tcggcgccat ccggtgcagg ccacgggcct 120

gcttccaagt gcgtctgcgc gccggccacc catgccgggt ccttcaagtg ccgtttccac 180

cgcaccaact cccagggcca cggccacggc cagggaagcc gtccttcttc gcctccttca 240

ccggtcgcgg ccaacgcggt gccgcggcac ccggcctcgc cgtcctcgtc ctccggcacc 300

gtcacgaccc agtgacgcaa ctcaagcatc ggcttcgaga atcaagaacg ctcgacaatg 360

aaaagggaaa ggaagatcat atacatatca taagaaaggg agtttattta ct 412

<210> 516
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e01b1

<400> 516

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agggtgttct ttgacatgac cgtcggcggc gcgccggcgg ggcgcatcgt gatggagctg 180

tacaaggacg cggtgccgcg gacggtggag aacttgcgcg cgctctgcac cggctagaag 240

g 241

<210> 517
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e02b1

<400> 517

caaaaatggc aaagttgtgg agagatatcc accaacaact tcaccattcc aaattgagaa 60

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ctgtatatat tgccttttt tttcttccgg aaactagagt tttacttgtg attatgactc 180

ttgtgcgata taatgttttc cattcctgta aagtaattca ctgatatgta tagacatttc 240

cgaa 244

<210> 518
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e04b1

<400> 518

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ccgtggcacg tgtgcttctc ctacgcgcgg gcgctccaga acacctgcct caagacgtgg 120

ggtgggcggc cggagaacgt ggccgcggcg caggaggcgc tgctgctgcg cgccaaggcc 180

aactccctgg cgcagctcgg caagtacacc agcgacggcg aggccgcgga agccagcgag 240

aacatgttcg tcaagaacta cagctactga tccgtcggcg agctatctat ctaattatct 300

acctatggag ggagagtgct agtagcgcct tgagcagctt gagggcacct tag 353

<210> 519
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e05b1

<400> 519

gcggacacac acacacaagc gaaacccact ccacccaacc gtctgggagc agagcagagc 60

ctctctttgt ccttcacctt cgtcttcctc cctctcggca gctcgacctt tgcatggcag 120

cagtggctag ctccaagggg cgggtgatcg ctgggagcct cgtcgcgcgc gtactcgccg 180

gcaaggccaa cgcctccccg aggagggcgg tgcacgcgtg ggcctacgac aagaacgtgg 240

acgagcaggt gcgcccggcc ttcgtgccgg acgatgtgat cggcggcgcc gggagcccag 300

acaagtactg gggccctcac cccaccac 328

<210> 520
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e06b1

<400> 520

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gtttcataag cacgtacata ttctgcaatg ctgtgaacat atattatccg tgcttccagt 120

gatggatatg ctagttttat cagcaataat aaatatataa tgatccgtgt tgtcctctg 179

<210> 521
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012e07b1

<400> 521

tcgcggacgc gtgggcgtct cgtctcctcc ttcctcctgg tcctccaagc caagaaactc 60

ctcatctcca ccgtccgccc gtgaaggaag gaggcgatcg gccatgggga agatgtgctg 120

cagccaggag gaggacgagg cggggttcaa cctgctgccg ctggtgatgg ccgccttcgt 180

catcatgctg ctcttcgtcg gctgctcgcc gccgccccgg cgcaggcgct gcgtcgtcgt 240

tccgtgctac tgacctgacc tgacctcatg gtggccggg 279

<210> 522
<211> 401
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189012e08b1

<400> 522

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aggtttatgg aaaagaaggg aaaaactgct ttacggaatc tcctttggcg gacactctta 120

ctcagtttta ccagaaatca ccaatatcac atatttccaa ggttaagaca ccaacactct 180

ttcttctcgg agcaaaagat ctccgtgttc ctgtttctaa tggcctacag tatgcaaggg 240

ctttgaagga gaggggatt gacaccaaaa ttattgtctt cccagaagat attcatggac 300

ttgacaagcc acagtccgac tttgagagct tcctcaacat aggagtttgg ttcaagaagt 360

acttgagcaa ataagcattg ngctcttaaa cacaatgatc t 401

<210> 523
<211> 195
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012e09b1

<400> 523

ttttctcctc ccaataaaga tgaggatcga catcatccaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaacac aagaacacca 120

gagccgatga caacgaacaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacaaag 180

gggggggggg tttta 195

<210> 524
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012e10b1

<400> 524

cgcgaaggcg ctgatgaaga ggcgcacata ccttctggag atgaatggct tctaggagtt 60

cttcctgggt atctgcttgc tggtgcaagc aaagggtcgt ttggctgctt taaacttttg 120

gtctgtgtaa tagtctgtgc ttgttgtctg gtgtgttagc tctttgtaca gtggtgacat 180

ttggttagct atatgaaaaa catatcaagt tggtc 215

<210> 525
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012e11b1

<400> 525

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gcagcgcccc cctcctccgt ctccgtcagg gccggcgcgt ccgtctcggc gaagctgacc 120

cctcgccagg ccgcgagggc tgggttcggt ggcagggtca gcgtcagctc gggcaggaag 180

tgcggcggcc ccgtgcgggc gtcgctcttc tcgcccaagc ccgcggtggc catggacgcg 240

aggccgacca aggtgcagga gctgcacgtg tacgagctca acgagcgcga ccgcgagagc 300

cccgcctacc tccggctcag cgccaagcag agccagaacg cgctcggcga cctcgtcccc 360

ttcaccaaca aggtgtacaa cggcagcctg gacaagcgga tcgggatcac ggcggggatc 420

t 421

<210> 526
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012f01b1

<400> 526

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catacatctt atggtgatct gcggcaattt ctgtgtggtt ttttcgacac cacaaccgga 120

aacaaaagag aagcaaggag ttattttgag atctcgcaat cacttggggt ggacaatccg 180

tctcaaatct tattcatcac agatgtgttg caagaagccg ttgccgcaaa gagtgcaggt 240

ttcgaggtaa taatctccat tcgcccgggg aacgcaccgc ttcctgcgaa tcatggcttc 300

cggactatca gttccttcag tgagatctga caaatgtgca agaaacgaac atgccaggga 360

atctctattg ggtgtgtaac atgacagtgc ttcgtggccc cccggatcat gttcttgtaa 420

tagtagtat 429

<210> 527
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012f02b1

<400> 527

caggcatttg ctgagatgta caatcgtcca attcacatat attcatacag tacagagcct 60

attaacattt ttcagggaag ttataacaca gatgttcctc cggttaggtt aagttaccat 120

cacggtaacc attataattc agttgttgat cctcgtcggc tgacagttgg ggcaggcctt 180

ggatttagct cccttagagg gaccaacagt gttgacagag accaagtgaa ggctgcaata 240

aaagctcagc aagatcagca gattgagaac gcacttttgg ctgaagggcg actctactct 300

gatctggagt taactgagaa ggaaatagag cggatggtga tggaggcctc tcgggcagag 360

tatctgaacc agcagcaagt taacttcaga gagtcatca 399

<210> 528
<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012f03b1

<400> 528

gcgcccacgc gtccgcggac gcgtgggcaa gaatagattg gatctatccg gctgcacttt 60

ataatatttt ttagtatttt tcggat 86

<210> 529
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012f04b1

<400> 529

gcgcccacgc gtgcgccagc ctcctcagtc ctcacagcat cctctcagtc cttagcttgc 60

ttccctcgcc gccacccacc aaggaaagga ggatgtcttg ctgcggcggc aactgcgggt 120

gcggcgccgg ctgcaagtgc ggcaacggct gcggcgggtg caagatgttc cccgacgtgg 180

aggccaccgc cggcgccgcc gccatggtca tgcccaccgc ctcccacaag gggagctccg 240

gcgggttcga gacggccggg gagaccggcg gctgcgactg caccacctgc aagtgcggca 300

ccgcgtgcgg ctgctcctgc tgcagctgca actgagccgg cgcccaggag gccggccggc 360

agaggcgagc acgaggatga ggaggacaag caagcaagca ccatcaccac cagttcacca 420

ccacccag 428

<210> 530
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012f05b1

<400> 530

gtttggagcc ataaacatga gagtctgggc atcatctctt gcttccgtgt ctcttggtgg 60

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agagcatgcg ggctgtctga attgcgctgg atgtggaagc tcttgtaact cacatgaaca 180

tgtagtggaa catcttgttt gtagcatgta aatcttaggg atactgttga gcctgtgtag 240

acacactgta acattaatca tgagcaccaa ttgtcatagt ttttgagcaa ctgggcacac 300

atcataagcc cttgtactat ttttcacatg taatctgcaa ttgcagtatg ttcatctgtc 360

ttgtactaat aagtgaaaga catttcg 387

<210> 531
<211> 382

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012f06b1

<400> 531

gcgcccacgc gtgcgatcga caacgtgaag gcgaagatcc aggacaagga gggcatcccc 60

ccggaccagc agcgcctcat ctttgccggc aagcagcttg aggacggccg caccctcgct 120

gactacaaca tgcagaagga gtccaccctg cacctggtgc tccgcctgcg tggtgggatg 180

cagatcttcg tcaagaccct caccggcaag accatcacgc ttgaggttga gtcttcggac 240

accatcgaca acgtgaaggc gaagatccag gacaaggagg gcatgccccc ggaccagcag 300

cgcctcatct ttgccggcaa gcagcttgag gacggccgca ccctcgctga ctacaacatg 360

cagaaggagt ccaccctcca cc 382

<210> 532
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012f08b1

<400> 532

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ggtgttgctg ttgcatcact gtttcgcaat cagatagatc tttttcgtca gctttggaga 120

ccaactgaaa gctcaggtca acgtgtaatc gtactgttaa gtgcttgctg tttgttggaa 180

gttgttgggt ccagatcaga tcgatcggga tcagggagta cagctctgtg cagaagtggt 240

ttctgacgtg ctaaaaacta tacaagaaag agagctaaat 280

<210> 533
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012f12b1

<400> 533

gctaaacagc agcgcgcgag caatggcgtc cacctcctgc ttcctccacc agtccaccgc 60

gcgcctggcc gcctcggcac gccctgcgcc cgccgtcggg cgcacccagc tgttcgtctg 120

caaggcgcag aagagcgacg aggctgcatc tgacgctgcc gtcgtcacca gccggcgcgc 180

cgcgctgtcc ctcctcgccg gt 202

<210> 534
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g01b1

<400> 534

cttgtcctcc ccactcagtc ctcggttccc ggtccggttc ggttccgttc ggttcgttag 60

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gtctcgcctg ggccaccgac gaccagtccc tacagaacgc cttttccaag gacggtgacg 180

tcatcgactt caagatcatc actgacaggg agacgggccg ttcccgcggg ttcgggttcg 240

tcacct 246

<210> 535
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g02b1

<400> 535

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agttatcgat ctatctaccg tgtcgtcgtc gtcgtcgtcg tcttcgtcag caagttatct 120

tcggtgtcgt cgtgttcctg tgtcagtctg agtcgtcgtg tgtgtggtgt ttttgatcgc 180

gagctcgagt gtcgctctgt ccggggttaa ttagagctgg ttacgcgagg aagaaacaac 240

atgtgttact atctttcagt cggtcggtcg gtcggtcagt cggtgatgca gcaatcccct 300

tctgtcatgg attgggatgt gatgttggaa tatcctatgt ttgaacaagt ttaaatggat 360

taagaaaatg caagtcata 379

<210> 536
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g03b1

<400> 536

gcctctcaaa gctgcatgtg ctactgtatg ttgatgtaca tagagaagat tacatctaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaa 119

<210> 537
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g05b1

<400> 537

tcttcaccca ggatatgcag ggggaggagg acatggagcg gccactgcca agggaacggc 60

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gggtggcgag gagtaccggc atatcgagtc cctggtgttt tcctctacga gctggggagg 180

gcgtgtggtt ctctcctcga ttggaacgaa aagaagaaac tacagcgtca cataactgca 240

gcaaagaagg tactgcatga gatgtaacag ggtcgtatta tggaagaaca gaatccctgc 300

tgttgcacgg agtgagtaca gtt 323

<210> 538
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g06b1

<400> 538

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gcacgttcgc ctccgccacc ccgggcgtca acccggccgg ctcgatgctc gacccgtcgg 180

ccgggctccc cgccggcgac ccgctcctcc aggacatcct catgtactgg ggcaagccgt 240

tctgagaatc cagctccgtg gctgtacgtg tggtttggga gggaatcgat cggggtgact 300

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aatagggcac aaggagc 377

<210> 539
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012g08b1

<400> 539

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ctgggtcttc tgaatctatt ctggctgttc ttttctcaag tccttgccat gtaagctact 180

atgtttgaga ttgctgggat tctgttgact gtattaccgg attaatttgt tgggtcaaaa 240

tatgttcagt gggctgctat atttgaccgg tgctgaatca tatgccgcat gttctggttt 300

ttttttttcat gccaaaaagt ttggtgctag cgtgggggga gtgtcaaact atctaccaga 360

gtctttgtaa gattttt 377

<210> 540
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012g09b1

<400> 540

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tgcttgtata atacagtaca gtatatggtg attgtcaccg tgtggtcaaa ctcctatctg 180

gtttgctggt gtaccgtatg tacgtgttgt agctatgggt attgtatttg tagggcagat 240

ttcatttgtt cattctcagg tggtttttgg t 271

<210> 541
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012g11b1

<400> 541

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cggctcgcaa gtccgccccg gccaccggcg gcgtgaagaa gccgcaccgc ttccgccccg 180

gcaccgtcgc gctccgggag atccgcaagt accagaagag caccgagctg ctcatccgca 240

agctgccctt ccagcgcctg gtgcgggaga tcgcgcagga cttcaagacc gacctccgct 300

tccagagctc cgccgtctcc gcgctgcagg aggccgccga ggcctacctc gtcgggctct 360

tcgaggacac caacctctgc gccatccacg ccaagcgcgt caccatcatg ccc 413

<210> 542
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012g12b1

<400> 542

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aaccttgcat tttatgtctg agaattagtg attgtgtgaa ccattattaa ca 172

<210> 543
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012h01b1

<400> 543

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ccgacatggc caggctgcgc gagttcggcg ccgccgtgag gcgcatcttc ggcacggacc 120

tggccgaggg cagcagggcg cgggccagca gcgagcgcgg cggcggattc gaggcgggga 180

aggtgctgga cgggcgcgag gagacgtact gggcgccgac ggcggaggac gggtggcgga 240

acgggtactg gatcgagctg cggcggccgg cgggggcgcg ggcgttcaac gtggtgcggg 300

tgcaggagca cgtggcgctg gggcagc 327

<210> 544
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h02b1

<400> 544

cggagatcct gtccaagaac ggcatcaagt tcggcgaggc cgtgtggttc aaggccggcg 60

tccagatctt ctccgagggc ggcctcgact acctgggcaa ccccaacctg gtgcacgcgc 120

agagcatcct cgccatctgg gcggtgcagg tggtgctcat gggcttcatc gagggctacc 180

gtgttggtgg cggccccctc ggcgagggcc tcgacatcat ctacccagga ggcgccttcg 240

acccgcttgg cctcgccgac gaccccgaca ccgccgccga gctcaaggtg aaggagctca 300

agaacggccg cctcgccatg ttctccatgt tcggcttctt cgtg 344

<210> 545
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h03b1

<400> 545

gcgccctctc gtgcggcaaa ccatggcgtc catgaccggc ctgtcgcagg gcgtgcgtct 60

cccaggcccg gccggcaggc gcgccagcag gttcatcgtg agggcgtcgt cggcggaggc 120

ggaggccgcc ggccgccgcg cggtccttgg cctcatggcc agcggagtcg tcggcagcgc 180

gttcgctcag gtggtgcacg ccggcaccgt cgcggccatc aaggttggcc cgccgccgcc 240

gctcttcggt ggactccccg gaacggacaa ctccgacgag gcaagggact tcgacctgcc 300

cctgaagaac cggttctacc tg 322

<210> 546
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h04b1

<400> 546

gcgcccacgc gtgcggctcc tccttccact cctacttcgc cgtttccggg agattcttgg 60

attggttttt cggcaaagat ggtttcgccc gtcgtgatcg cgtcggcggg gctcgggatg 120

ctggcgggcg tggcgatggc gagccgggga tcgggcgacg ggctgccggc ggcgtccagg 180

tgggacgcgc ggccccgttg ctccacgtgc agcggcaccg gccgggagga gtgcctctgc 240

agccgttggt ccgacggcga cgt 263

<210> 547
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h05b1

<400> 547

ctttaaactg tattcgccat ggtagatggg ttgatgcagc ccacttgaag gagtcttgtg 60

gttcactaca ttcaacaagg aaaaagcaaa agagtgtagt cttgtgatgc agcccacttg 120

tttcattttt gtgtgtattt tgaagatggg gtgcaggaag acagtgattt ttgtgtgtat 180

tttgctcagg gttgacattt tttccgcttt acagattttg gctgccatcc catgggtgca 240

caggtgcagt gctgtgggga ctggacatgc agtgtgctgg caccgacttg catttcacaa 300

acaaaactgt ggatttattt tttaagtccc tcgtcactgt aaattgtgtg tgtttgtatt 360

gtagattaaa aagaggaaca ttgta 385

<210> 548
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h06b1

<400> 548

gcgtgccgga ggcggccatg tcggggatgc tggcggcggt gcggcggttc aacgaggagc 60

ccgcggaggc caaggcaccc tactacacgc gggacgccgg gcggcgcgtg cgctacaact 120

gcaacgccga cctcttgcgg acgctgctgg gcaagtggcg cgacaccatc tacatggacg 180

acgtggacca gctggcgccg ggcgaggagg aggaggtcct cccgccggcg tgcaggggcg 240

tcgcaccgaa gtacacggcg cagatgcgga tgctggggcg cgcgctcttc gagctgctgt 300

cggaggccct gggcgtgcgg cgcgggtacc tggaggagga ggccggctgc ctggagacgc 360

tc 362

<210> 549
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h08b1

<400> 549

ctccacgacg cgcgcgagcg agccatggcc gccctccgcc tcgcctcctc cgtcaccctc 60

tgcccggcgg cc 72

<210> 550
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h09b1

<400> 550

cccacgcgtc cgatttccta ctggatcctt acactcgact accaatatga gagggagcag 60

cctagtgcag gcgaccatga tattcttcat tggatgcctt gtgctttgtg cacagtgtgc 120

tgtcgataat aagcaaacga tggtcaacca agatgatcat gcagcgaaca caaataccaa 180

cgctaccatc gtcaactcaa catctgtagg cgagagcaag aaaaccgagc tattttgcag 240

cctctatctc gtatgttatt tcaactttga gctccgtgct aagtgctact gttgccagaa 300

taagaatggc gaatgttaca agacgaagag tgagtgcctg cagaagtgcc attcctacaa 360

cggttaatgc ccaccttcat cggggtctct gggatag 397

<210> 551
<211> 249
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189012h10b1

<400> 551

tcgcggacgc gtgggcggac gcgtgggcgg acgcgtgggc ggacgcgtgg gtcgtgttcg 60

gtagtagaat ttggctacag ttttgaatta tgataccccc ctgtgtttgt tatccaagac 120

ttcgttgaag tagatcgcat gctattctgg tacaatggtt attgtctgag cttttaaatt 180

atctgcccgc ctgggagaat cttatgcttg tgagttcttg tcataaagat ggattttact 240

ccttgcgtg 249

<210> 552
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012h11b1

<400> 552

cccacgcgtc cgcctcatcc tccatgtgga gatggctgca cctaggccta cttagttact 60

tgcctactaa gcatccagat ttcctacaag tgtcgtatca ttatggtctc cgaaatacca 120

gtacttttgt gtcgtgagct tgtgtctgtg ttttgccttg ttgagaataa ctacactctg 180

ttggtgaaaa agtgaatttc gt 202

<210> 553
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189012h12b1

<400> 553

tcgctcatcg gcgcatcgca tcgcatccca tcgcatggcg gctgcggcgg tggcctccaa 60

cgggggtgcg gcgcccgtgc ccgggcgcct cgcgtccgtc tacagcgagg tgcagacgag 120

ccgcatcgcg cacgcgctgc ccctcccctc cgtcctccgc tcccacttca ccctcgccga 180

cgggcccgcc agcaccgccg tcggaagccc cgatgagatc gccaagctgt tcccctgcct 240

gtacggccag ccgtcggccg ccgtggtgcc gtccgccgag ccggtcgaga cgaagccgct 300

caagatcggc gtcgtgctct ccggtggcca ggcgccaagc ggccacaatg tgatctgcgg 360

catctttgat tacctgcagg agcgtgccaa aggcagcacc atgtatg 407

<210> 554
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a02b1

<400> 554

ctgcggctcc gacggcctgc cccacctcat cgtcagcggc gaccagcggc actggggcga 60

gttcatcacc cccggcgtgc tcttcctcta catcgccggc tggatcgggt gggtcggccg 120

cagctacctc atcgccgtca gcggcgagaa gaagcccgcc atgcgggaga tcatcatcga 180

cgtcgagctc gccgccagga tcatccccag gggcttcatc tggcccgtcg ccgcctaccg 240

cgagctcatc aacggcgacc tcgtcgtcga cgacgccgac atcggctact aagtag 296

<210> 555
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a03b1

<400> 555

cggacgcgtg ggcagcgcag tctagctagt caacagtgcg atccaagata gggagccagg 60

acgcgacgag gcggccactg atggcggcac cggcgccgag gagcgtgggc gtggcggagc 120

gggcgctgcg cggggtggcg gacctgatca agctactgcc gagcggcacg gtcttcatgt 180

tccagttcct cagcccgctc gtcaccaaca acggccactg cgccgtctac aacaaggtgc 240

tctccggggc gctcctcgcg ctct 264

<210> 556
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a05b1

<400> 556

tttggttcat aagcagtgaa gggtgatgcg ataggggcag aaatttccga aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaagg ggggg 135

<210> 557
<211> 345

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a06b1

<400> 557

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ctgactcacg acaggccata tataaagtgc cattgcaggt gtgacaactc tgacattgct 120

ttgggcattg cttctccatt tatctttctt attagctcct aagaatatgc gtatgaccat 180

gttcatgtac caacatggct cgagacagca tgctcgtatg tgaatgctat cgggggctat 240

gtatatgcac ggacgcattg cacctgacgc atgttgtcga atacgatgat gcggacatac 300

gcgtcagggt actccttatt gacctccttc acctcgttga tcacc 345

<210> 558
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a09b1

<400> 558

ctctcacgtc atcctcgatt ccttccgctc cctcgcgacc cccgccgccg cctcctctcc 60

cgctaccgcc gcgccagggc ctcgcctcgc cctcactggc caccggcgac ctccaaccct 120

tgttctccgc ctcgtcgcca tagccacctt gagctcgagc agaggagcgg ctcggcagga 180

gggggcaaca gccagccgcg cctcgtccgt gtcgcgtggt ggcccagatg cggtcgtccc 240

gtgctctgcc tccacgagcg cggcctcgat ccaaactcgg caggaggagg ggagcagcag 300

ctggccatgc tgtgttggcc gtggaggagg aaggagctca tgtggctagg gattggctac 360

cctc 364

<210> 559
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013a10b1

<400> 559

gcgtcccgag ccctgaccag tgccatacag gccactcaac caaaacgagg tcagatttct 60

caatttccac tcggaaatcc gaaccgtggt catctccgtc gccgccgcct gccgcctgcc 120

gccgccatcg ccatggcttc cgctctacgg gcccttcacc accgcctccc ccgctctctc 180

caccactcca atccccttc cacctccgcc tcacctcacg acctccgcga gctcctccgc 240

atccaacgca tcctcggtga ccccgcagca accacccagc ccacgcaaac gcaacaacgc 300

ccacgagccg ccgccaccgc agacctgcac cgacttc 337

<210> 560
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013a11b1

<400> 560

cccacgcgtc cgcttaatct gtagcggcta gatagaagtt catgggctgc tgcggtgggg 60

gcgccatgtc gtcgtcgtcg tcgtcgaggc cgaggggcgg catccgggag gagacgctgc 120

tgcgcgtccc gggcgcggcg gtgcacctcg tggccggctc cgaggggccc ctcgagctcg 180

gccgcggcga gctttccgtc gtgaggatct tcaaggacga cgtggcggtg accaccgtgg 240

tgcgcgtcgg ccgcgacctc ggctggccgc tggcgaggga cgagcccgtg gtcaaactcg 300

accgcctgca ctacctcttc acg 323

<210> 561
<211> 332
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013a12b1

<400> 561

atcctttcca ccttctcagc cacacagaga aagagcgtcc aagctccagc tagctagcca 60

ccaatggccg ccgcactgag cctacgcgcg cccttctccg tgcgcgccgt ggcgccaccg 120

gcgccccgcg tggccctggc gcccgtggtc ctcagcctcg ccgacgtcaa gcaggtgcgg 180

ggagccaggc tccgcgcgca ggcgacgtac aaggtgaagc tggtgacgcc cgagggcgag 240

gtggagctgg aggtccccca cgacgtctac atcctcgacc aggccgagga ggaggggatc 300

gacctgccct actactgccg cgccggttcc tg 332

<210> 562
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b01b1

<400> 562

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catcgccgcg atgggccgca agctcgcgct cctggtgggc atcaactacc ccggcaccaa 120

ggccgagctc aagggatgcc acaacgacgt tgaccgcatg cacaagtgcc tcgtcgaccg 180

gttcggcttc gacgaggaga acatcaccgt cctcctcgac cgcggctcct ccgggccgca 240

gcccaccggc gccaacatcc gccacgcgtt ggccaagctc gtcggggacg cgccgccggg 300

ggact 305

<210> 563
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b02b1

<400> 563

caacagcaac gaagaagtac tctgcttttg gatcgaggac tgaagaaaat agataggaga 60

atcgatggct accttcgcga cgtcgacgcc ggcggtgatg gggtctgctc gcacgggccg 120

ggtggccggg cctcggcggt gcgtggtggc gcgggcgtcc gcgacgatgg cggcgccggc 180

ggcggtggcc gcggggagga cgcactacga agtgctcggt gtgggtgccg gggcgagcag 240

gggcgagatc aaggcggcgt accggcgtct tgccagggag gtgcacccgg acgctgctgg 300

cggcggcggc gacgaggggt tcattcggct gcacgcggac tacaccacgc tcgctgaccc 360

cgacgagcgc g 371

<210> 564
<211> 116
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b04b1

<400> 564

catgtttgaa gtcattaccc ttaaccgtaa ggaggggat gcctaaggct aggcttgcga 60

ctggagtgaa gttatcgtcg ctgtaatttt atcatcaagt ggaattctgt aatttt 116

<210> 565
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b05b1

<400> 565

ggttgcaggc ccagagctct ttagctgaag caggtgctgt ctccggcgtg gcgctaccca 60

aagggccaat ggatgtggcg aggcatgtca tgagggacgc tggcatcaaa ggtctgttca 120

agggcattgt cccaacaatg ggccgtgaga tccccggcaa cgccataatg ttcggcgtgt 180

acgaggccgt caagcagtac atggctggtg gtcgggacac ttcaggcctc ggccagggct 240

ctctcatcct cgccgggggc ctcgccggag gagccctgtg gctcacggtg tacccaaccg 300

acgtcgtgaa gagcgtgatc caagtggacg actacaagaa gccgaggtac tcggggtcga 360

tcga 364

<210> 566
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b06b1

<400> 566

gcttcctaca tatccgtatg atcgcttgag gacatcttca agcaatcctg tcacagacat 60

tgatagtacc aggcgtgaga cgtatctatc ttcggcagag ttcagggaga agtttggcat 120

gacaaaggag gcttttgcaa agctaccaaa gtggaagcag aataggctca agatcgctct 180

tcagctcttt taaaatgtta tgctgtcaaa tatgcactag ttatgtcttg cctgttggtg 240

aaagcaagga cgttgagatt ggttttcaaa ggcaaatctc aaacacgaag atctctctcg 300

cactcgtcgc aatgttaaga agagacatcg gtaagtgtaa gcctatctgg gtcaagggga 360

ccctcggtag gcgtcggagg ggctggagca gtgagttttg a 401

<210> 567
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b07b1

<400> 567

cggacgcgtg ggcggacgcg tgggagaaga agggtgttga tgagttctct cactgtgttc 60

accttgtctc atgggagaag gagaatgtgt ccagtgaggc tcttgaggct gcccgtattg 120

cttgcaacaa gtacatgacc aagcatgcag gaaaggatgc cttccacctc agggtcaggg 180

ttcacccgtt ccatgtgctc cgtatcaaca agatgctttc gtgcgctggg gctgataggc 240

tccagactgg tatgaggggt gctttcggga agccgcaggg agtctgtgcc cgtgttgcca 300

ttgggcaggt cctccttttct gtgcggtgca agcccaacaa tgccatccat gc 352

<210> 568
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b08b1

<400> 568

ggaatggaca tctctgcatt ttacccctga attcgtctgc aatctcttgc tctgttgtta 60

aatcttatca gttggctctg ttaaatctt 89

<210> 569
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013b09b1

<400> 569

gtcaaggatt agcaagcagt aatagtgaag ttgtactgag gagcgagcga aacgatcgaa 60

ggttcacgac cccttattag ctattaagag agtttgaggc aatgtatgtg atacagattc 120

agagttgtta tggagatatt aacctgcaat aagctgctat gctgttgtgt actagtgctg 180

ccttatgtat accctgtttc ctgtagtgca ctgtaggttt tatctcaact actatgtatg 240

tattcccctc tgaaaatgat gaattctcct gaggatttct ttcatca 287

<210> 570
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013b10b1

<400> 570

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tggcggccat caggaggcag ctaggctact tcaagcccca gagcagcgcc gagtggcacg 120

ggccgctccc ggtcgcggcc gacacgacgg cgctgccagt cgcgcccgac gccggcccgg 180

acgcggagta agcgtccaag ggcgtgctgg tgctcggggc gacggactgg gtggacaact 240

acaacgtccc ggtgcgcacc gacgacgtgg aggccgtg 278

<210> 571
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013b12b1

<400> 571

actaaacaag agcttgagct cgatcgatcg aactcaaaga tgtggaaacc atgtaccgat 60

gaataatact caatcaacct tttgcttcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg 229

<210> 572
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c01b1

<400> 572

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aatatgtgta tgtccatgtt catgtacgaa catggctcga gaaagcatgc tcgtatgtga 120

atgctatcgg tggctatgta tatgcacgga cgcataatat tatacaatat ggcgactata 180

tacgttttaa tggtaaccaa tgg 203

<210> 573
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c02b1

<400> 573

gcctggccga gcagctagcg aagaagttca agggccagga gtgcaccaac accaccggag 60

ccaacaccgt gcccggcacc gagccgcagt tccccgacta cccccagttc ctcgaccgat 120

gccacctcaa cgcgtcggtg accgaggacg ggcaggtgat gccggcatgc gtgcccggcc 180

ttgtggccga cattgtgctg accaactaca ccaagtccca gtacaaccgg tttctcaacg 240

acaccaagta ctctggcgtc gggatcgcca acgaaggcga ctgggtggtc gtcgttctta 300

gcaccagcac cgactccggc gactacttcc ctgctccccc aggctccaac tgggcttc 358

<210> 574
<211> 249
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c04b1

<400> 574

cccacgcgtt cgatcggagc accaggtacc gagggctgtg ggagagccgc tttcgcggca 60

aatacggctc cttcgacgac cagacaactc ttggggccat gcgctataca ttcggaccca 120

tcccgagcta cgccagacct cattggacca tccagatctt gggcatgcgg gtggacaacc 180

tggaagacgg tctgcagcgg ccggtgcatg tccacggctt tgtcgccgtg agggacacct 240

cggatcaca 249

<210> 575
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c06b1

<400> 575

ggaagaagtc gttctttctg ggggagatgg gaaatggagc aaagatgaaa ctggtggtca 60

acatgatcat gggaagtatg atgaatgctt tttctgaggg actctgtttg gctgacaaaa 120

gtgggttgag cccccagacg cttcttgatg tcctggatct cggtgcaatc gcaaatccga 180

tgttcaagat gaaagggcct tcaatgctgc agggcagcta caatccagca tttcccctga 240

aacatcagca gaaggatatg aggctggctc tgtcgttggg agatgaaaat gccgtgtcca 300

tgccagtggc agctgctgcc aatgaggcat tcaagaaagc aagaagcttg ggact 355

<210> 576
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c07b1

<400> 576

aaattattaa aatatttaaa aaaaaaaaaa aaataaaaaa tatatcaaaa aaaaaaaaa 59

<210> 577
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c08b1

<400> 577

gcaactacca tttccaccac aacaaccata tccacagccg caaccatttc catcacaaca 60

accatatctg cagctgcaac catttccgca gccgcaacta ccatattcgc agccacaacc 120

atttcgacca caacaaccat atccacaacc gcaaccacaa tattcgcaac cacaacatcc 180

aatttcacag cagcagcagc agcaacaaca acaacaacaa caacaagaac aacaaatact 240

tcaacaaatt ttgcaacaac aactgattcc atgcatggat gttgtattgc agcaacacaa 300

catagcgcat ggaagatcac aagttttgca acaaagtact taccagctgt tgcaagaatt 360

gtgttgtcag cacctatggc agatccctga gcagtcgcag tgccaggcca tccacaatgt 420

tgttcatgct attattctgc gtcaacaaca aaaacaacaa caacaacc 468

<210> 578
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c09b1

<400> 578

caaagctgaa ggtgtgaggc aaatgttctt ccctgctacc gtccccgcgt attaccgtgc 60

acctcctgaa gcggagttct gatctatgaa ggtgcagcta atctctcgca cgatgacatt 120

tttcctgtgt tggtagttgt tgaaaatgtg ctgtgttggt agtccgaatg gatcgaggaa 180

cgtgtatagt atctccgttg ggtgctgatc ctgcttttgg aatgttctga attgctgcat 240

cggtgcccat gttgattcgt cctagctaaa ttgtacatct ttgttgtgct actaatgaat 300

tgcgcctgct gttctaacta gtggaccaag gtggtgttcc ttgtctactg atcgtgagc 359

<210> 579
<211> 94
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013c12b1

<400> 579

cccacgcgtc cgccggacta tttaaactct gaactatgct gtgatggttg aactgatgtt 60

ggattgttaa gggttatgtt ggaggccact ttat 94

<210> 580
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d02b1

<400> 580

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ggcggcgcgg cggcccccgg ggactacgtc tacttcaagt ccgtcgtgcc gctccacaag 120

atctctcttg caggtgccga tgagtccgtg cagatgatgc aaccaagctc aggaggagct 180

cgttgaagat cttatccttt gtgttgtttc gttctagttg atcagtagtg gagcccagtt 240

ggggtcaatc ggggaccgtg tcacatttgg gttcttcttt tattttgggt tccgtagtca 300

gaccttgatt gtatctagat gatgtaatgc tttattcatg taattgtgtg aagtgcttgc 360

<210> 581
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d04b1

<400> 581

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gcagcgaagc agcggcggcg gcggcgatgg ggatcggcga gcactttgag ggcgtgaagc 120

agcactgggc gcgcaacttc gccttcctcg actacttcaa gaaggtctac ggccgcgacc 180

agcccctccc caagtggtcc gacgccgacg tcgaagagtt catcgcctcc gaccccgtct 240

acggcccgca gctcaaggcc ctgagggagt ccaggaagtt cgcgctcggc ggggccctgg 300

ccggcgccgc gcacctcggc ggcgttgcct tcaagtactc caagagcccg cacggtgtcg 360

tgctggcgac cgg 373

<210> 582
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d05b1

<400> 582

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ctgcctgctg aatccatgag caggcaagag acaacctggc gaactgaaac atcttagtag 120

ccagagg 127

<210> 583
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d06b1

<400> 583

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tctccatcga cgactcgctg ccagcgcgcc acttcctcaa gtcgtgggag ccggccggtc 120

tcgccggccc gcagccgcct cgcgccatcc tgatcgtgtc cggccactgg gagacggaca 180

ccccggctgt caacgtcatc cgtggcacca acgacaccat ctacgacttc tatggcttcc 240

ccgaccggat gtacaagctg gtgtaccctg cgccgggcgc gccggacgtg gccatgagga 300

ccaagaagct cctggaggac gccgggttcg ggccggtgag cgaggaccac ggtcgcgggc 360

tcgaccacgg cgcgtgggtg ccgctgatgc tcatgtaccc 400

<210> 584
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d07b1

<400> 584

aaaattatat aaattataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaattaaaaa 60

aa 62

<210> 585
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013d09b1

<400> 585

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ccccgatccc ggcgagcgag atggccaacc cgagggtgtt cttcgacatg accgtcggcg 120

gcgcgccggc cgggcgcatc gtgatggagc tgtacaagga cgcggtgccg cggacggtgg 180

agaacttccg cgcgctgtgc accggcgaga agggcgtcgg caagagcggc aagccgctgc 240

actacaaggg cagcgccttc caccgcgtga tccccgactt catgtgccag ggcggcgact 300

tcacccgggg caacggcacc ggcggcgagt ccatctacgg cgagaagttc gccgacgaga 360

agttcgttca caagcacacc aagcccggga t 391

<210> 586
<211> 337

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013d10b1

<400> 586

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gactggtggt atacccggcg ccggagatgg gcaagggcgg cggctgcgtc cccagcaaga 120

agcgccagct gccgaccacc accgttgccg ccgcgccctc gtcgtcgtca gccaccgcgg 180

tcccgcggga cgcgcccgag gaggccctgg acgcatccac cggggagtcg aggcggacgc 240

tgcggctgta catcgtgttc tactcgatgt acgggcacgt ggaggcgctg gcgcgtcacg 300

cggcagcggg agcgggtgcg gtgcaagggg tggaggt 337

<210> 587
<211> 212
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013d11b1

<400> 587

gacccgagca agccacactc tccagcacca gcaggccggc ggcaagcagc gcaagcacag 60

cagcaaatgg ctaccatcag cgccgccgcg gcgaccaccg tcgtcgcccg tgccgccatc 120

gccaggccgc aggccctagg tctgccccag ctgaggacga ggagcgagag ggtgaggtgc 180

agctactcca aggacgccaa ggaggcgacc cc 212

<210> 588
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013d12b1

<400> 588

cttcaattta gtcttccaac tttattgtat gtccggataa gcccttgcat ttcttccgtt 60

gggacctctg gcttgatgtg tcttgcggat taatccatag attattctgt acgatgcaaa 120

tcagcctacg gcttactgta agttgcagtt taggctttct ctctactgca aattttactt 180

tgaaagatc 189

<210> 589
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013e01b1

<400> 589

caagctatat acctacatag tacagccatg gcccccaccg tgatggcctc gtcggccacc 60

tccgtcgctc ctttccaggg gctcaagtcc accgccggcc tccccgtcag ccgccgctcc 120

aacggcgcta gcctcggcag cgtcagcaac ggtggaagga tcaggtgcat gcaggtgtgg 180

cccatcgagg gcatcaagaa gttcgagacc ctgtcctact tgccaccgct cagcacggag 240

gccctcctta agcaggtcga ctacctgatc cgctccaagt gggtgccttg cctcgagttc 300

agcaaggttg ggttcatctt ccgtgagcac aacgcatccc ctgggtacta cgatggccgg 360

tactggacaa tgtggaagct gcctatgttc ggatgcacc 399

<210> 590
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013e02b1

<400> 590

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tgatccgcgc tcagcgtaag ggtgcgggct ccgtcttcaa gtcccacacc caccaccgta 120

agggccccgc ccggttcagg tcgctcgact tcggcgagcg caacgggtac ctcaagggcg 180

tcgtcaccga tgtcatccac gacccggggc gtggtgcgcc gctggccaag gtgacctttc 240

gccacccgtt caggtacaag caccagaagg agctcttcgt cgccgccgag ggtatgtaca 300

ccggccagtt cgtctact 318

<210> 591
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013e03b1

<400> 591

cccacgcgtc cgcggacgcg tgggcgcgag agatatttcg tcccggacgc gtccgccccg 60

acgaccgacc gacgaacagc gcaaaagtag gagggagagg atgagcacca tggcgatgtc 120

ggcgctgaac ccggacgcgc ccatgttcat cccggcggcg ttcaagaagg tggaggacta 180

ctcgcccgag tggtgggagc tcgtcaagac caccgcctgg ttccgcgacc actggttccg 240

ccagcaccaa ctctacgagg acctcgccga caacgtgg 278

<210> 592
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013e04b1

<400> 592

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ggggctccca gacggtagaa ttttgtaccc aagtcggaca atctgtcaaa cttggcatga 120

aagattagga cacaatgctt gggctttgtg tcgctcggca acgtttttgt actttatgtt 180

gctcgagttt tgaaccacac cagttacgga atacggcaga ataatctgac atttctacag 240

aggtgtttgt atttgcgagt tatactatgc aattacgttt tgtgtgctgt gtgtaa 296

<210> 593
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013e06b1

<400> 593

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atgttgggga gtacattgtg cccgttccac atgtcaagca agtgaagctc tcaagtgtcg 120

gaggaaggct gataatggca tctgatggca tatgggatgc gctatccaat gaggcagcgg 180

ccaagtcatg ccgaggattg cccgcagaac tcgctgcaaa gcttgtggtt aagcaagctc 240

tgaaaaaatg tgggctgaaa gatgatacca cctgtgtggt ggttgacatc atcccatctg 300

atcatcattt gacatcgcca cagttatccc caaagagaaa tcagaacaag ctcaagtctc 360

ttctttt 367

<210> 594
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013e07b1

<400> 594

tcgcccacgc gtccgcggac gcgtgggatt gccgctgaaa ttgccaagca gctacagaaa 60

tttcatcaag tagatatacc gggatcaaaa gaaccacagt tgtggaatga cgtattcaag 120

tttttgaaaa aagcttctgt attgaagttt gaagataatg agaagcagaa gaggtatgag 180

atgatctctt ttagagaaat acaagatgaa gttaaagaac ttaaggatct ctccgatctt 240

ttgcatgctc ctgttgtgtt tgcacacaat gacttgctat cgggtaatct gatgctgaat 300

gatttggaag agaagctata tttcattgat tttgagtatg ggtcatatag ctaccgtggc 360

tttgacatcg cgaatcattt caatgagtac gcaggctttg agtgtgacta caacttgtac 420

ccagataaag atgtacaata ccatt 445

<210> 595
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013e08b1

<400> 595

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gtgggccacc tccgtcgctc ctttccaggg gctcaagtgc accgccggcc tccccgtcag 120

ccgccgctcc aacggcgcta gcctcggcag cgtcagcaac ggtggaagga tcaggtgcat 180

gcaggtgtgg cccatcgagg gcattaagaa gttcgagacc ctgtcctacc tgccaccgct 240

cagcacggag gccctcctca agcaggtcga ctacctgatc cgctccaagt gggtgccttg 300

cctctagttc agcaaggttg ggtttatctt ccgtgagcac aacgcatccc c 351

<210> 596
<211> 402

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013e11b1

<400> 596

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aaggagacgt tcgtgcagga gttcgacacc gccggccgcc gccatggtca ccacggtcac 180

cacggccgtg gctccggcca cttcgaggtg cgcgagagca ggctggagga ggacatcaac 240

acccgcaccg gcgagttcca cgagcgcaag gagaacttcg tcgtcagggc cgatgactaa 300

gcttacacgt tacggagcac actacgatgt gtgtatatgt cggcatcata tatatgtatg 360

tgtgatgttg cgcacagtcg tatagcgtat gcaggcgtgc gt 402

<210> 597
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013f05b1

<400> 597

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ggcgcccacc aggcgccctg ctgcttcgac gcgctcggcg cccgccttgt cgagcgcgcg 180

gggttcccga tctgcttcat gggcggtttc tgtgtttctg cctcacgact tggattgcca 240

gatgttggat taatctccta tggagaaatg gttgatcaag ggcgtctaat caccgaagca 300

gtttcggttc ccgtgattgg tgatggagac aatggttacc gaaattctat gaacatcaag 360

agaactgtaa aaggatatat taatgctggg ttggctggaa tcatgcttga agatcaggtg 420

gcaccaaaag catgtggaca cact 444

<210> 598
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013f06b1

<400> 598

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agcgcagcgt agcgccggct tccgccgctc cgacccgccg ccatgaggga gtgcatctcg 180

atccacatcg gccaggccgg tatccaggtc gggaacgcgt gctgggagct ctactgcctc 240

gagcatggca ttcagcctga tggacagatg cccggtgaca agaccgttgg gggaggtgat 300

gatgctttca acaccttctt cagtgagact ggtgctggga agcatgtccc ccgcgcggtc 360

tttggtgatc ttgagcc 377

<210> 599
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013f07b1

<400> 599

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tccaagatcg ctgatgcctc tggcatggag tggttctcca tcatcaccac ccccaacccg 180

atcttcagcc accttgctgg gaagacctcg gtgtggaagg ccatctcgcc ggaggtgctg 240

gaggcgtcgt tcaacaccac gccggagatg gagaagctct tccggtccaa gaggctggac 300

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gcaggaataa ataaattta 379

<210> 600
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013f08b1

<400> 600

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actgggtcgt ctcccagctg gcgatcttgg actcgaggat gggttccctg caggacaaac 120

agaggaaacc agtctcctac atgtacgccg acgacttcat gacatctgac gccagcgact 180

aagccctgct ctaggaggga ggaagcttct gaattctgac ccccaagtat ccagctccag 240

tatcgtatca tgtagtacta gaaaggtgcg ttagttgcgc caagtcatct gcgcgtctcg 300

gtttttgttg tacataggta ggctccggaa gctttattat tagtccatgt gttccacgtc 360

ggtggtagtg acaaattgtg aacatgacca tgta 394

<210> 601
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013f10b1

<400> 601

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aatataatat 120

aggaaattat ttttttttgg gggg 144

<210> 602
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013f11b1

<400> 602

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gcggcgcgcg cggcgacggg gtttggcgcg cggtggaagg ccatcgcggc gaggctcgag 180

agggtgccgc cgtgcctgtc cgacctgtcc agccaccccc gcttctccaa gaacgcgctc 240

tgccgggagc tgttgcagtc cgttgctgcc accctcgccg aggccgccga gctcggcgtg 300

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gccgggaagc tggaccttaa cctccgggac t 391

<210> 603
<211> 331

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013f12b1

<400> 603

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agcaaggacg tgggcaaggg cttccgctgc atccgcatgg tcaacaacac ccgcctcaac 120

ttcgacgccc tcaacggcga caaggaccac ggcggcgtgc acgacggcac caccgtcgtg 180

ctctgggagt ggtgcaaggg ggacaaccag tgctggaaga tctggccctg ggccgaggcg 240

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ccccccgtgc atgccgtgcg cgtcttctgc a 331

<210> 604
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g01b1

<400> 604

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tagaagcctg tgtacaagct cgtaacgaag ggcgcgatct tgctcgcgaa ggtaatgaaa 180

ttatccgagc agcttgcaaa tggagtcctg aactagccgc agcttgtgaa gtatggaagg 240

cgatcaaatt cgagttcgag ccggtagata ctattgataa gtagataaaa ctaaagataa 300

agaagagaag gtataaat 318

<210> 605
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g03b1

<400> 605

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ggggtgtcgt ggactggttg cttgtgtagt ttg 333

<210> 606
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013g04b1

<400> 606

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agaggcttgt tagggagatt gcccaggact tcaagactga cctccgcttc cagagccatg 180

cggtgctggc ccttcaggag gctgcagagg cctacctggt cggtctcttc gaggacacca 240

acctgtgcgc catccatgcc aagcgggtga ccatcatgcc caaggacatt cagctggcta 300

ggaggatccg tggcgagagg gcttaaggtg ctgtgcttgc cttgcctgtg ggaatcgctc 360

tggtgggcat ctgtgtctgc ttttgctgct gaacacttat c 401

<210> 607
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189013g05b1

<400> 607

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tcaaggactc gccgatgggc caggagaacg acctcgacgt catcgcgctc gcccgcttcg 180

ccgtctccga gcacaacaac aaggccaatg ccctgctgga gttcgagaat gtggtgaagc 240

tgaagaagca aactgttgct ggcacgatgc actacattac aattcgggtc actgaaggtg 300

gggccaagaa gctctatgaa gctaaggtgt gggagaaacc atgggagaac tttaagcag 359

<210> 608
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g06b1

<400> 608

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atcaaaccta ccggagatga agttcttctc ggcgttcgac ccgtggccgg tgttcttccg 120

ccgggagtgg ggccgcacct ggcccttcct cgccggcttc gccgtcacgg gggccctcat 180

caccaagatg accgccggct tcaccgagga ggacctcaag aactccaagt tcatccaggc 240

gcacaagaag aagtagtcgc cgcccgcccg gcccgtccgc cgccaggtca caggggcagc 300

agctgagtaa ccagcatgtg tccttgatgc ggggagccag tcctcaccct cactattgtg 360

attgagcttt tatgtttttt ttttcaaatc caactgcatg cattttt 407

<210> 609
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g08b1

<400> 609

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ggatgtcttg ctgcggagga aactgcggag gcagcaccgg ctgcacgtgc ggcaacggct 120

gcggtggatg caacatgtac ccggaggccg aggccggcgg ggccaccctc cttgtctgcg 180

ccaccgacac ccacaaggcg agctcccgcg ggatggagat ggcggacgaa aacggcggat 240

gcggctgcaa ccagtgcaag tgcggcacca gctgcggctg ctcctgctgc agctgctaga 300

tcatcgatca tcgaccatgc atgcaccgtg ccgggcgtgc atcatcgagc atatcgatct 360

actactacca taccat 376

<210> 610
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g09b1

<400> 610

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ctcaagagtt atctgcattt tgttttatgg acgtttcagt gtttgttatg caagctagga 180

agtgatccca ggatgtctct gttatcaatt tcttcgtgtt atgaggattg cttgtaccct 240

ggtgtactga tgttaccgtg ctgtgccaag taaagaacct ttgctataat gtcacccttg 300

tttaaaaaaa aaaaaaaaaa taaaa 325

<210> 611
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g10b1

<400> 611

cctaatcaaa agtaatcatt ctcttctaga aagtagaaat aaaaggttcg gggttcgtta 60

atgggtacgt ttgtaggttt tgtcccgtct ctcaaccgtt cccagatgca atggtttcga 120

gagaagtgag aatatttcaa ccccgaacac atgtcctgtt taatttacag ccccctcact 180

tgatctaaag gtggttgtgg c 201

<210> 612
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013g12b1

<400> 612

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cgtgggcatc aacaagggcc acgtcgtcac caagcgcgag ctgccgccac gcccgtccga 120

ccgcaagggg aaaggtacca agagggtgca ttttgtcagg aacttgatta gggaggttgc 180

tggattcgct ccctatgaga aacgtatcac tgagcttctt aaggttggaa aggacaagcg 240

cgcactcaag gtcgccaaga gaaagcttgg tactcacaag agagctaaga agaagagaga 300

ggagatgtca agtgtcctta ggaagatgag gtctgctggt ggtggtggtg ctggtgacaa 360

gaagaaatag agc 373

<210> 613
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h01b1

<400> 613

cgcacactgg ctcgcctcct ctcacccatg gccggcgccg ccacgctcgt cctctccctc 60

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gcggccggcc ccgccgtctg gacgtcgctg tcggacgccg tcatgggcga cggcgccgac 180

cagccacccc gccgctggat cctccttccc cggccggcgc cggccatggc gaccaccacg 240

cgtacaagta caaaagccct catgctccaa tgagatccag cgagacaggt tcgtccccat 300

ctagcccggt cagcgctcgt accctgcatc gaccagatcc actcgac 347

<210> 614
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h05b1

<400> 614

gtgtgtttag accaagtttc caatggctcc tcttggtgac gctgttgccc ccgcgtgcgc 60

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tgccggggtc tccctcgccg agtccggcgg cttcgtcaag gcgcctggag gcgcgcccgc 180

caacgttggt tgcgccatct acaagctcgg aggctcctct gccttcatcg gaaagtttgg 240

cgatgacgag ttcggccaca tgctggtgga gatcctga 278

<210> 615
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h07b1

<400> 615

agggcatcaa gaagttcgag accctgtctt acttgccacc cctctccacg gaggccctcc 60

taaagcaggt cgactacctg atccgctcca agtgggtgcc ctgcctcgag ttcagcaagg 120

ttggcttcgt cttccgtgag cacaacagct cccccggcta ctacgacggt cgatactgga 180

caatgtggaa gctgcctatg ttcgggtgca ccgacgcaac gcaggtgctc aacgaggtgg 240

aggaggtcaa gaaggagtac cctgacgcct atgtccgtgt catcggcttc gacaacatgc 300

gccaggtgca gtgcgtcagc ttcattgcct tcaggccacc aggctgcgag gaatctggca 360

aggcctaaag tgcaagttga agtaacacat atacatgcca tgttagttca catttgtcgg 420

cagct 425

<210> 616
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h08b1

<400> 616

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cccatctggt tccccgggag cacccctccc ccgtggctcg acggcagcct tcccggagac 180

ttcggctttg acccctgggg tcttggatcc gacccggaga gcttgcggtg gaacgtgcag 240

gcggagctgg tgcactgccg gtgggcgatg ctgggcgcgg cgggcatctt catcccggag 300

ctgctgacca agatcggcat cctcaacaca ccgtcgtggt acaccgccgg ggagcaggag 360

tacttcaccg acaccaccac cctcttcatc gtggagctca tcctcatcgg ct 412

<210> 617
<211> 267
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189013h09b1

<400> 617

cggacgcgtg ggcgcggctc aagaaccgca ccgggccggc caagttcccc tacatgctgc 60

tctaccccaa cacctccgac cacacgggcc aggccgaggg gctcacggcc aggggcatcc 120

ccaacagcat ctccatctga ggacctccat ctctgcttgc ttgcttgctt gcaccggata 180

ctagctacta gctactgtgg gtgttctgcc ggtgcatatg cttgccatga tctcaataat 240

aataaggcaa taatgcgtgc gtgcncg 267

<210> 618
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h10b1

<400> 618

gttcggcaag gcgaagaaga acacggactt cgtggcgtac agcggcgagg ggttcaaact 60

gatgatcccg gccaagtgga accccagcaa ggagcgtgag ttccctgggc aggtgctccg 120

ctacgaggac aacttcgacg ccaccagcaa cctctccgtt ataatcaacc ccactaccaa 180

gaagaccatc accgactacg gttcccctga ggagttcctc tcccaggtcg gcttcctcct 240

cggccagcag tcctacggtg gcaagaccga ctccgagggt gggttcgagt cagacgctgt 300

ggcgacggcg aacgtgctgg agagctcggc gccggtggtg gacggtaagc agtactacag 360

cataacg 367

<210> 619
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h11b1

<400> 619

gaagtaccag aggaaagctg gtcacagaca gccaaatacg aggttaagaa ttaccggcat 60

aagtggatat gaggaattcc ctgctgatcc aatacttcaa gttccagctt aagtgtaatt 120

gtaagttgtt tagttacaaa tgcttggtat tacattagag tgcaagagca ttttccccac 180

tgttccccaa gtgaggctct tccccaagtt aatgtactcg aaatgctgcc attcgttgag 240

tggttggttc catccttttg tttattcc 268

<210> 620
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189013h12b1

<400> 620

cgcgaagagg aggtctcgct ctcgcagatt ccaccccacc ccgccgcgca tgctcgccca 60

tcatccgatc ccaaatccgc aacccacacc gtcccaatcg tccgcgccga cccccgtgat 120

ccctaagatc aagacaatcc ccggcccggc cagcccccgc cgccgccccc tcctcgcccg 180

gcgaagatgc acctgtggcc gtcgctccgg atccgggact cgttcaagca cgcctacctg 240

gagaagcttg agttcaacct cgcccacaag aagcgcgcgc aggggcaggg gcaagggcgg 300

cagggccagg acggggacga ggcgcctctg ctcgagggcc gctcgtcgtc gat 353

<210> 621
<211> 130
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a03b1

<400> 621

ttcgtcgccg aaacccttac tcgcccccgc ccccgcctcc cgccgccaaa cacccatcgc 60

catgcgacca ccgagaggcg gcggaggttt ccgcggacgc ggcggcgacc gaggtggccg 120

cttcggtgga 130

<210> 622
<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a04b1

<400> 622

cccacgcgtc cggtttgaga ccctgtctta cttgccaccc ctctctacgg aggccctcct 60

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tggctttgtc ttccgtgagc acaacagctc ccccgggtac tacgacggtc gatactggac 180

aatgtggaag ctgcctatgt tcgggtgcac cgacgccaca caggtgctca acgaggtgga 240

ggaggttaag aaggagtacc ctgacgccta tgtccgcgtc atcggcttcg acaacatgcg 300

ccaagtgcaa tgcgtcagct tcattgcctt caggccacca ggttgcgagg aatctggcaa 360

ggcctaaagt gcaagttgaa ataactgata tacatgtcat gttagttcac 410

<210> 623
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a06b1

<400> 623

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attcaaaccc caactgtctg gccgtcctgc ctcacgcctt gcataatctg tagcaggatt 120

gggaagtgta tagtggagca agttgggtgt cgacgtgtgt gtgaaggtga gagacttttt 180

atgtgaagaa atgtaatgct tgccagatgt tgtaaaactt caaacactga aatgaagggg 240

ttgaatttag ca 252

<210> 624
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a07b1

<400> 624

gtcgccggcg ccgtggagca gggcgacggc tgcgactccc cgtccgcggg cgggggcatg 60

gtggccgccg catgcccgcg ctgcttcctc tacgtgctca tcgcccggag cgacccccgc 120

tgcccgcgct gcgagtcgca cgtgccgcca cccccggccc cggcgcccaa gaagaagccg 180

cggatcgacc tcaacgtcgg cttcctcgga acctagccat gccaagccaa gaagaagtag 240

gtcaagatgg ttgtcgtccg tcctcgtcct cgtcctcgtc ctcggcgcgt taggtaggca 300

gcaggcctcc ggtgctcgga ttggccacga cgacgccatt gtttttctga tgccaccgac 360

ggattccggt acatagggga ggcgctccag atttttgctt gtccatttcc aagtatggcc 420

ggccgtccgt ccgtccgtcc ccgattctgt catgtcagat caatcaaaca ctcgacagaa 480

catgaatgaa tgaaactact 500

<210> 625
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a09b1

<400> 625

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tttttctgtt tcctcttatt atggctgtga ttgattaatg gacaagtaat gttcagttgt 120

cacagagtac tagcttatac gggagcaacg tttgccctag ttttgtaata atggtatata 180

tcaactcttg acgttctgtc 200

<210> 626
<211> 319
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a10b1

<400> 626

ggactttgca ttttcagccc tttttctgtt gagttttaac attccagaaa atatgtggtt 60

attatatatg gcatgttcaa tgcgtttgct ttttagcaat ccctataaca tgtcttatta 120

gtccaacaat attgttttgc gattgagatt aaatttttct cgcataacaa tattgatttg 180

cgattgagaa aaaataatgt tttcctctca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaac aaaaagggg 319

<210> 627
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a11b1

<400> 627

tccacgctcg ctcgctcgcc cgacgcgatg gctcccacca agaaggcgaa gaagagcggg 60

gagaacatca acaacaagct gcagctggtg atgaagagcg gcaagtacac gctcggctac 120

aagaccgtcc tcaagacgct ccgcagctcc aaggggaagc tgataatcct cgcaaacaac 180

tgccctcccc ttaggaagtc agagattgag tactacgcta tgttggcgaa aattagcgtg 240

caccatttcc atggaaacaa tgttgatctt ggaactgcct gcggcaagta ctaccgggtg 300

tgctgcctca gcatcctcga ccctggtgac tcggacatca tcagcaccac caccaccacc 360

cagtgaagag aagagaagag agctctccac ctattttatt tagtcgagtt gtagggt 417

<210> 628
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001a12b1

<400> 628

tggacgcgtg ggcggacgcg tggggaaaac tcacacgggg actctttgaa ggtatcagaa 60

ttctatgatc ccaagtctga gtcagacgtg gacatggact ataacagctt gtactcgagg 120

caggactttc tagagggcga ggatggtgag ctttcatggt ttaatgctgg cgtgcgggtt 180

ggagtcggga ttggcctcgg catatgcgtg ggcgtcgggt tgggtgtcgg cctgctggtc 240

cggacatacc aaggcaccag caggaacttc aggcggcgac tgccctgatg gccaacgctt 300

cccacaagta tataggaaac tgactgccca tcttcctgcc catgctagtg atagatgagc 360

gaggccttgt gttctcccct cctgcagctt gtgtgcactg cgaaccattt ttgtcccttt 420

gaggtatgta aatgcgagta tgtatatgta tagtaaaaaa ataaataaag agtcgagtcg 480

ggtcgag 487

<210> 629
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b02b1

<400> 629

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ggagccggac aagaagacgc tcgagaagat tggggcgatc ccggccgtcg aggagtttgt 120

gttcctcgag ctatgatgga cagacagcgg gcgctcgctc cactcatcgc tagaataagt 180

gatcatccc 189

<210> 630
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b03b1

<400> 630

gtacattgta cctgcccttg gttttgagta ccatgctgga gttctggatc atcttacatt 60

atacaaggtg ctggcatttt gacgttgc 88

<210> 631
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b05b1

<400> 631

gtcaaccact cccacttgct agctagcagc agccatggcc gccctctcct ctgcagcggt 60

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gcgcgcgtcc ctgggcaaga aggccgccag cgcggccgtg gccatggcgg ccagcgcgat 180

gctgctggga gtgggcgggt cggcgatggc gcaggacgtg ctcctgggcg ccaacggcgg 240

cgtgctggtg ttcgagccca acgacttcag cgtcaaggcc ggggagacca tcaccttcaa 300

gaacaacgcc gggttcccgc acaacgtggt gttcgacgag gacgcggtgc cctccggcgt 360

ggacgtctcc aagatctccc aggaggagta cctcaacgcc cccggcgaga ccttctccgt 420

caccctcacc gtccccggca cctacggctt ctactgcgag ccccacgccg gggccggcat 480

ggtcggcaag gtcaccgtca act 503

<210> 632
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b07b1

<400> 632

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cgaggcggcg ccgtacgtcc tcacgttgct caacacattg ctatggctat actacggctt 120

caccaagcct gacggcctgc tcatcgccac agtcaatggc ttcggcgctg tcatggagac 180

catctacatc gtcctcttcc ttgtctacgc ggccgatcat gccaaaaggg ttaaaaccac 240

aaagttggtg gcagctttgg acattggatt ttttggggtc gtgttcgcga ccacaacatt 300

cgccattcgt gggcttgaca tgaaaatcgt ggtcattgga ttgatatgtg cttgccttag 360

cgtgttcatg tatgggtccc cactcgctgc cgtgagaagg gtgatcgcct cgaggagcgt 420

ggagtacatg cccttc 436

<210> 633
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b08b1

<400> 633

ggtctcggcc cgtgagctag ctcgaagacc aggtctttgc cttctagaac ttggattcta 60

gcagcggtct ggggtctatg ggcgtaggcc cgggcaaagt aaccgtctct ccagccaagt 120

gaccatgacg gcatgtactc gcatgaaacg caaaggggcg tcgcatgcct cgacgggaat 180

aatatgtagc tcaaggacgg tccgatatat acaaaccctc ccgtgccctc ccttcctcaa 240

gacctataag aagcggggaa ccttgccgca atggggcacg tgaaatgggg tagaaacgac 300

atatgtatgt gtagatattt atgcatatac ccac 334

<210> 634
<211> 236
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b09b1

<400> 634

cttacgcgtc cgcccactcg tccgggtggg tgtggtgttt catcagatca gaccagacag 60

tccctccctt ctcccttgtg caaattaaca gacgctttct gagctgtgtt aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag gggggccgt tttaaa 236

<210> 635
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b10b1

<400> 635

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gtgtgatggg ctggctcgtg attaacttgg agtgtaataa tcaaaactat cctagcaatt 120

ctttgctaag tgtaataatc aaaacgacaa gtctttgctt aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggggg c 281

<210> 636
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001b11b1

<400> 636

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tggatcaaat acacagataa agcaatttgc ttgtacaagg tttaaagctg aatttcctat 120

ttttgataag gttgatgtca atggaccatt tacagcccct atttataagt ttctcaagtc 180

gagtgctgga ggatttttgg gtgatatagt gatagtggaa ctttgagaag ttcctagtgg 240

acaaaaatgg caaagttgtg gagagatatc caccaacaac ttcaccattc caaattgaga 300

aggacatcca gaaactcact gcggcataag tgcttttgag tccggcttca gttaagcact 360

cctgtatata ttgccttttt tttt 384

<210> 637
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c02b1

<400> 637

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tgcaggtgat gcaaccaaga tcaaggagga gctcgatgaa gattgttttc tctatgctgt 180

ttcgtttcca gctgatcagt agtggtgccc agttgggacg atcggggatc tgtgtagcat 240

ttggggtagt cttcttttat tttaggtttc gtagtcggac ctttattgta tctggatgat 300

gcaatgctct attcatgtat tgtctgaagc ggcgattgta agccaactat gtatctc 357

<210> 638
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c03b1

<400> 638

ctcacgcgtg cgctttttac atgcatgcaa tggagacagc acattgcaag gagcttaatt 60

actacgatga tggagtgctc atacaaatga tgagctacta aaaaataaaa tgaagttgcc 120

tgtgtgtgtt atttcagtaa gtgtgtctat gtctgtacct tgcacacaca ctgtgtgtgc 180

atatatattt atgcgacatg tatgcacgcg tccgtatgcg tgagtgaact ggcaactcct 240

tgctgtactc cagtcctagc cgatgcgcac gtctgacgtg cctgacctac ttgtt 295

<210> 639
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c05b1

<400> 639

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gccccccccat gttgtctgat tgtttcctgg cttcctgcac tcttattcac tatgatattt 120

ctttcctgca ggttccgatg ttcactgctt ctggcttacg tgttcggttc ctcaaggtat 180

gtggagcaag tacaatatga aacattgaaa atgtttggta ctaaaaccat ctcttgatgc 240

attttcaggt gtgggagaag agtggctaca acaccgttga gtgggttcgc tacatcacaa 300

gggctggatc atatgaaatc aggtgttagt gaccaagaaa aatggcgtgg gctcattatt 360

tcgtggattt gcagagctct ttttgtactc atcatgattg atcagatggc acgtaaatta 420

tgacccaatt cgttgcaagt ttgaacttca gcagagggca gatcagagca ggcag 475

<210> 640
<211> 182
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c07b1

<400> 640

gtatcgtcct cgacctacgt tggtaggtgc ttacatacat atgagaatta caacactggc 60

tatacataca cacatatatt atatgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggggc 180

cg 182

<210> 641
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c09b1

<400> 641

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caacaggcag cacaatgact tgcggattgt cgcgaacccc ttcaccgggt gaacacaaga 120

agcaactatt ccgccggcga tgtacagttc tacttctacc tgctgtgagg tgcatagtct 180

ttggggtagt tctgggaaaa aaactccccc ttgtacatag tagggtggtg aagacagcgg 240

aggaaaatat gtattgttgt agtcaggtgt atcggtaaag aattccagat gtagccgtca 300

ttatattttg gccttgtaag ttaaataaga ggccttctca caaattctgt aacagtatca 360

tgagaacaaa agtccttgtc tcattg 386

<210> 642
<211> 440
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c10b1

<400> 642

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gatgtctggg cgtggcaagg gcggcaaggg gctcggcaag ggcggcgcca agcgccaccg 120

gaaggtgctc cgggacaaca tccagggcat caccaagccg gcgatccgga ggctggccag 180

gaggggcggt gtgaagcgca tctcggggct catctacgag gagacccgcg gcgtcctcaa 240

gatcttcctc gagaacgtca tccgcgacgc cgtcacctac accgagcacg cccgccgcaa 300

gaccgtcacc gccatggacg tcgtgtacgc cctcaagcgc cagggccgca ccctctacgg 360

cttcggcggc tgagcgccat cagcgcgctg ccgctggctg acactgctgt ttcctgcttt 420

gctctgtagt cttactcccc 440

<210> 643
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c11b1

<400> 643

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ggggcagcgt gacgaccacc agcaaggggc tcaagaagaa ggcgctcaag gcgctgccga 120

agctggcgta cgcggacgcg gtggccgcgg ctgcggcggc gaggggcgcc gccgtcgcgc 180

ggtgcgcgcg ctcccgccgc aacgccaacg cccacgccaa ccaatcctcg ccgtccggca 240

gcccggccca cgccctggcg gccttcggcg ggggcggcgg tgggcataac catggtacta 300

caactactac cgcagtgaag tttttcttct caagaaatgg aaaggagaat aattagagct 360

gtgaatgtga ctcttttctg caacctttt cgccctgcac ttgcgctact gctccagtac 420

gtgtggatgt ggggaacatg acatcagatt tgtaaagagc gtgcgtggtc tcgtgtaaaa 480

ata 483

<210> 644
<211> 177
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001c12b1

<400> 644

ctttctcggt gtgagtcaca acagagcgag agaaagaaaa aaaagatgga gatggccatc 60

gacacgccat cgccgtcgcc gtccgtctcg ccggcgccgt cggcggtggc gggccggcag 120

acgcgcgcgg ccgagtcggt gcgggttgag caccagctgg cgcgtgcgcc cctggag 177

<210> 645
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d04b1

<400> 645

gtgaagctga cagactagga ggtggatgag atgatccgtg aggctgatgt cgatggtgat 60

ggccagatca attacgaaga gtttgtgaag gtgatgatgg ccaagtgagc tgccatacta 120

agctagttct atctcgatgt tagcagctag tttagccttg aaaactgaca gcacttggta 180

ctactgttaa gtccagtgaa tgaacatatt gctcgctctt cctttcttct cagggatgtt 240

gagaatttcg tttggatttt cctgcagttg tattaccttt gtacaatgta gctttctttc 300

caaattgaga tcatgaattt gctgt 325

<210> 646
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d05b1

<400> 646

atcaaattcg agttcgagcc ggtagatact attgataagt agataaaact aaagataaag 60

aagagaaggt at 72

<210> 647
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d06b1

<400> 647

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agtcgtcggg agcgcgttcg ctcaggtggt gcacgccggc accgtcgcgg ccatcaaggt 120

tggcccccg ccgccgctct ccggtggact ccctggaacg gacaactcgg acgaggcaag 180

ggacttcgac ctgcccctga agaaccggtt ctacctgcag ccgctgccac cggcggaggc 240

ggtggtgcgg gccaaggagt cggtccagga catgctcaac ctcaagccgc tcatggacaa 300

gaagcaatgg ccgtacgtta tgaacgacct ccgtctcagg gcctcctacc tgcgctacga 360

cctcaagacc gtcatctcct gcaagaccac caaggagga 399

<210> 648
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d07b1

<400> 648

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ttgggttttt tgatgacaag ctgggggcac tttgcatgca atggttggaa gataaggttt 120

tctcgatcag agaagctgcc gcaaacaact tgaagcgcct ggcggaggag tttggtccag 180

agtgggcaat gcaacatata attcctcagg tgttggagaa gataaacaac ccacattatc 240

tgtatcgcat gaccatcctg caagctatct cattgctagc ccctgtcatg ggtgcagaaa 300

taacatgcca aaagctgctc cctgttgtca ttaattcctc gaaggacaga gtgccgaaca 360

tcaaattcaa tgttgcgaaa gttctgcagt cgcttgtacc aatccttgat caatctgtcg 420

ctgagaagac tgtgaagcca tgccttgtcg agctgagcga ggaccctgat gtggatgta 479

<210> 649
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d08b1

<400> 649

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gaccggagaa gcctcccgta cgccagctcc tccgtgagaa gcgattcggt aagaaggaag 120

cccgccgcct cctcccccga ctacagccgc cgtcctccgc agcccacccc gcccgtgtcg 180

ctgtcgaaga aggaatcatg ggatctcatt caggattcgg agtttgagat actcgacagc 240

tagcaataat aagagatcgt ggttgatctc catggcttcg ttaattttct tcattgccct 300

actacccttc acctggtttg taaatggcgg ccttacaggt ggtgccagtg atggttggaa 360

aagatcttgt cagtcagtca gtaataatat cgtgtgcata tatatgtcct ctcatcccac 420

ttgctgtaac ataaggaatt tgtcatggat ctggc 455

<210> 650
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d09b1

<400> 650

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggggggg 180

gggccctttt aggggaccaa agtttcctcc ccggggctgg gaaggtaaaa ttttttttttt 240

ggggccccca aaataaaata aaggggccgg gttttaaaaa cgggggggagg ggaaaacccc 300

ggg 303

<210> 651
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d11b1

<400> 651

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agcaaccgcg agtactcatc caaagtactc gcaagcacgg atctatacta catatgcatc 120

ggtatcaatg aaaagggttg tatctgtgga ctggactgca gaatgccaca tgagaagggg 180

aaagcctagc ctatcgaaga ctagcatctt ctggaaacca ccatcttgca ccaacaggag 240

ggagtcgcgt agcataaagt aaagtagtag aagtgttatc aacctcgggc agagatcctt 300

tctcgactcc ctacaagaca gcaatcccag agccatacta tccaggtctc atctccattt 360

ctcatatgca tttcacatct caggtatcca gttctagttg tatcgatcgg gat 413

<210> 652
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001d12b1

<400> 652

gcaccaccaa atgtttcatt tataaggcaa agatggaatg atgttggttg agga 54

<210> 653
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e03b1

<400> 653

ttcacgcgtc cggtcagccg gaagtgcagc cgccgatgca cggcggcaat ggatttttcc 60

acccccttga tgctgctggt gaacccacac ttcacatagg gtaccctcct gagtccatga 120

gtaactcatg catgacaact ttcatgcccc cgtggttgcc ttgattgaag acggcgaaga 180

aagtgcgaag aataagtata tacgtggcac ccggccggcc gcatatatgc atgtatacta 240

cttcgagtga tggattattc cagtcaagat cctcaattat tttgcgtgca acttttgtgt 300

gatgaaaact tcagaaccct gtatttgatg ctcaacatta ttgtgttact gcatgtaaaa 360

gatcatacat tgtattacta gagtggctat gcgtgatgat attttccccc t 411

<210> 654
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e05b1

<400> 654

tttgacgcgt gggctgacgc gtgggtggta ctacaactac tacgacgaca ggcgcgtcgg 60

ggggcagcgt gacgaccacc agcaggggc tcaagaagaa ggcgctcaag gcgctgccga 120

agctggcgta cgcggacgcg gtggccgcgg gtgcggcggt gaggggcgcc gccggcgcgc 180

ggtgcgcgcg cttccgccac aacgccaacg cccacgccaa ccaatcctcg acgtgcggca 240

gcccggccca cgccctggcg gccttcggcg ggggcggagg agggcataac catggtgcta 300

caactactac cgcagtgaag tttttcttct caagaaatgg aaaggagaat aattagagct 360

gtgaatgtga ctcttatgtg caaccttt 388

<210> 655
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e08b1

<400> 655

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gcggcaaacc actcttgcag tggcatggca tggcaacctt tgctctgttc tgccccgctc 180

atacagagaa atggtggctt ggtgagtggg ttagccacta cccacttgtg gagcgatgct 240

gtgtaccaat aaatctgaat gaaatgtatg ttgtgcctgc acgtagaagt atccgcagca 300

actatttgta tgctgcgtac taactaataa atattaacag actatgttgt a 351

<210> 656
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e09b1

<400> 656

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gcatgatcca ggcggtgccc gggatgaagg cgctcgacat gaacacggcc gaggatgcca 120

tcgtgcgcct cacccgggag gtggtccccg gcatgattgt caccggcatg gaggtcgccg 180

agatcgacgg cgccccgaga atgggcccga ccttcggcgc catgatgatc tccggccaga 240

aggcggcgca cctggcgctc aaggccctcg gccggccgaa cggcatcgac gggacgctca 300

agaacgtgac cccggcgctg cacccggaga tgatcctggc ggcgaccaac aacggcgaca 360

tcgtggacgc ctaagcaaag caatgaacca cggacaccaa ggcgtacgta cgctggtg 418

<210> 657
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e10b1

<400> 657

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tcaagtacaa gagtgaggga agaatcgtgc ctgatggtgt caatgctaag ttgcttggtg 180

tccatggccc cattgctaaa cgtgcccctg ggcaggcgat cctggcttga ggcagttgaa 240

gcatgcacag accatttcct tcactagatg gaactcatga gttctgtttt tgctttagct 300

agtataattc cccatgcttg aacgagtgtt aagtaaagct ggctgctggc tgcagtataa 360

tctacttctg tagttcttta ctgtagaccg tttctcat 398

<210> 658
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e11b1

<400> 658

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gctatttcgg gacct 75

<210> 659
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001e12b1

<400> 659

tccacgcgtc cggccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtt cg 72

<210> 660
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f04b1

<400> 660

ttgacgcgtg ggcggacgcg tgggggggtga gttttggagc aaacactttc atctcagtct 60

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ggcagcccag ggtcttctct ctgggaggca gctgctgggg aggcctctgc agtcctccat 180

ctccaggtcg tcttcctccc ggaagtcccc cttcgtcgtc agggcatcgt ccagcccccc 240

tgccaagcaa aatgacaaca ggcagctgtg gttcgcgtcc aagcagtccc tcacctacct 300

cgacggcacg ctgcccggtg actttggttt cgacccctg gggctgtccg acccggaggg 360

caccggcggg ttcatcgagc ccaggtggct ggccta 396

<210> 661
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f05b1

<400> 661

tttggcaccc agccccctg ggcatatcgc gatgggtttc tcgtaaaact ctgacgtgtg 60

tatgtatgg 69

<210> 662
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f07b1

<400> 662

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accgctgcac catggccgcc ggctgcccgg tgcggaagca ggtgcagcgc tgcgccgagg 180

accggacggt gctcatcacc acgtacgagg gcaaccacaa ccacccgctg ccgccggcgg 240

ccatggcgat ggcgtccacc ac 262

<210> 663
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f08b1

<400> 663

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ccaagaggcc ctcagacaag cccttacgta ttcccctcca ggacgtttac aagatcggtg 120

gcattggaac tgtgcctgtt ggccgtgttg agactggtgt catcaagcct ggtatggttg 180

tcaccttggg tcccactggt ctgacaactg aggtcacgtc cgttgagatg caccatgagt 240

ctctcctgga ggcgcttcct ggggacatcg ctggcttcaa cgtcaagaat gttgccgaga 300

aggatctgaa gcgtggtttt gttgcatgca actccaagga tgaccctgcc aaggaggctg 360

ccaacttgac ctcccaggtc atcatcatga accaccct 398

<210> 664
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f09b1

<400> 664

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gcgggtggca ggtgcctgtc ggtgccgtcc gtcgtgccgg cgccggaagg gggagggatc 120

gtcctccgtc tccgcatcga caaggaggtc aaggcgagca ggagcccccg tccccgtggc 180

tgattactta cttggtcacc ttgggctcct tattatctac tactcgcctt aacctggagt 240

actatatata tttaccatgg ttggacattg gtgatttggt agtgaactgg tggtagtgat 300

cgaaggttga accatggttg ggctttgatt gattctgtcc atggcaatgt tggccaatgt 360

atcgcgcagg ctatatatgc agctgatcac 390

<210> 665
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f10b1

<400> 665

tccacgcgtc cgccagcaac aatatgcaca attaactcta aagcgtaggt atctagcagg 60

atttgtttct aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggccgttta aaagaaacaa acttaattgc 240

ccggg 245

<210> 666
<211> 167
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f11b1

<400> 666

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attatgcgag cagcttgcaa atggagtcct gaactagcct gagcttg 167

<210> 667
<211> 170
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001f12b1

<400> 667

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tggggaatgg tagcgagact ggtgttgata ttcgtcgtcc tgtaataacc ttcagaatgc 120

ttgctgctcc tgacggcctt cttcaatgtc actgtgcttg tttttgcttg 170

<210> 668
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g03b1

<400> 668

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tcccggtctg ctgaccaggg tggtggacaa ggtcttccgc ttcgttcgcc tcgccgagtt 180

cgagatcctc tttg 194

<210> 669
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g05b1

<400> 669

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ggagtgctac gccaatgagc acaaggtcac ggaggaggtc gcatttgctg ccatcgactc 180

gatgatagaa gatgagtgga agaccatcaa ccaagctcga ttcaaacatg gtcgtgagct 240

gctgcctgcg gtgcaacggt tcatcaactt cactctcagc gggccggtgt actacggtga 300

taggaaagat gctttcacct tcagctcgta tcttgaagac atcatcaaga gcctctttgt 360

caatcccatc cccatctagc aactactctg tgtacctcat gcaggcatgc a 411

<210> 670
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g06b1

<400> 670

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acccatgttt gggtgcaccg acgccaccca ggtgataaac gaggtggagg aggtcaagaa 120

ggagtaccct gacgcctatg tccgcatcat cggattcgac aacatgcgtc aggtgcaatg 180

cgtcagcttc atcgccttca agccaccagg ctgtgaggag tccggcaagg cctaaacaag 240

ctaactaccc ttcatcatac aacatggttt cgtgtcaggt tgattttatt tccctttttt 300

acttttgttc tgcttgtgta tgtgttctcc ccctgcaact cgagttaaca ttatatgagt 360

actacaaatc ataagagtac tacaactatc gttgggtgag aaatatgtga atgtaactac 420

ggctatgcat aaagtaaata tatactccc 449

<210> 671
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g07b1

<400> 671

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tcaagggtgg cgatcaagtg caagaacgtc caccgcgact acgagagcat ggcggtgggt 180

gccctggaca gcaccggcgc cttcagcgtg cccctggccg ccgacctcca tggcgccgac 240

tgcgtctcgc agttccacag cgctgcctcc aacgcgccgt gctccggtca ggagccatcc 300

aagatcgtgc cggtgtccga gggcaccacc ttcggcatca tggccggcgc caacactgcc 360

acgc 364

<210> 672
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g09b1

<400> 672

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ctcgtccagt cccccaactc gttcttcatg gacgtcaagt gccagggctg cttcaacatc 180

actactgtgt tcagccactc ccagactgtc gtggtgtgcc cgggctgcca aacagtgctc 240

tgccagccaa cgggtggcaa ggccaggcta accgagggtt gctccttccg ccgcaagggc 300

gactaaacct ctgaaggaag ccaagacgtt gttgaacttt gagttattcc agggtgttag 360

tctgaagatt ttgcaatgtc ggcaaattga acccatcttt ggcaatatga tatctagctt 420

gagtattatt atgatgacca 440

<210> 673
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g11b1

<400> 673

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cgggggtgcg gcccggcgtt ggcgtcgacg gtggggctct cgctgcgttg ggcgctgcag 120

cggtcgttct ttttgccgcc cttgacgggg agggcgtagt tcgtgcgcgc gctgcgggcc 180

gtggtcgcgg acgcgcccca ccgggggctg gagctctggc cggaggggag gcaggcggtg 240

ctgctggagg ccgtgatcgg gggaga 266

<210> 674
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001g12b1

<400> 674

agatctggtc tgtatgagac tgtcagtagg gggcatccag agaacactcc tctctcgtat 60

cagagcaccc ttcggacgca cggcggcgat ggccgaggcg gtgcaggtcg gcgggctgc 119

<210> 675
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001h03b1

<400> 675

cctgaaatca catatgagga agtcattatt gacaattgct gcactgacac tcgtgaagaa 60

tcctggtaca tttgatgtat tagtgatgcc aaatctgtat ggtgacatta ttagtgatct 120

atgtgctggt ttgatcggag gattgggctt aactcccagc tgcaacattg gtgaaggtgg 180

catttgtctg gcagaggctg ttcatggttc tgcacctgat atctctggca agaaccttgc 240

aaacccaact gctcttatgt tgagtgctgt tatgatgttg cgccacttgc aattcaatga 300

ccaagcagac cggatccaca atgccattct ccagacaatt gccgagggga agtacagaac 360

cgctgatctt ggtgggaagt catcaacatc agactacaca aaagcagt 408

<210> 676
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001h06b1

<400> 676

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cggttgctct cgcctcccgc tccgcagcac cgccggtagc tctcgcctcc cgctccgagg 120

caccgccggt agctctcgcc tcacgtcccg cggaaccgcc ggtagctctc gcctgccgct 180

gatacaatgg ccaacgccgc ggtcgacccc gagcgcaaaa ggtcgcggtt gacgtcgtcc 240

atgtcgtcca tgtcgtccgt ggacaccatt gtccgtctcc cgccctcgcc gatgttgacg 300

tccccgacgc gcgccccggt gggacacgcg ctggaggagc ctaccgcgcg gcacaggccg 360

gcgcggagat c 371

<210> 677
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001h07b1

<400> 677

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gcagaacgcc gccgacaaga aggacgaaaa ggccgtcaac gctgcccgcc gctccggcgc 180

cgagatcgac accaccaaga agtacaacgc tggaacgaac aaggctgcat ctagcggaac 240

ttccctcaac accaagcggc tcgacgacga cacggagaac ctttcccatg agcgtgtttc 300

aagtgacctg aagaaaaacc ttatgcaagc aagactggat aagaagatga cccaggcaca 360

acttgctcag atgatcaatg agaagccaca ggtgat 396

<210> 678
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189001h09b1

<400> 678

gtttgtcaac tctgacattg ctttgggttt tccttctcca tttatctttc ttatttgttc 60

ctaagaatat gtgtatgtcc atgttcatgt accaacatgg ctcgagaaag catgctcgta 120

tgagaatgct gtcggtggct atgtatatga acggacgcat aatattatac aatatgtcga 180

ctatatacgt tttaatggtc accaatggat aaaaaggacc aattttaa 228

<210> 679
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014a05b1

<400> 679

gctctcctca accccacacg cccacagatg gaggagcccg cggcgctgag gcccgcggcg 60

tgccgcgcca agggcggcgc gccggggttc aaggtggcgg tggtgggcgc ggccgggggg 120

atcggccagt cgctgtcgct gctcatgaag atgaacccgc tcgtctccgt gctccacctc 180

tacgacgtcg tcaacacgcc tggggtcacc gccgacgtca gccacatgga caccagcgcc 240

gtggtgcgcg gcttcattgg ccaacaacag cttgaggcag cacttacagg aatggatctt 300

gtcatcatcc ctgccggcct cccaagaaaa ccaggaatga caagggatga tctgttcaac 360

aaaaatgctg ggatcgttcg ctcgattt 388

<210> 680
<211> 394
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014a08b1

<400> 680

taccgcttgt gtcaacgggc tcggcatctc cgcggcgagg ctcgacatcg ccatgggcgg 60

cgtcgtgccg ctgcacaccc acccggccgc ctctgagctc ctcttcgtca ccgagggcac 120

catcctggcg ggcttcatca gctcctcctc caacaccgtg tacaccaaga cgctctacaa 180

gggcgacatc atggtgttcc cccagggcct gctccactac cagtacaacg gcggcagctc 240

gccggcggtg gcgctcgttg cgttcagcgg ccccaacccc ggcctgcaga tcaccgacta 300

cgcgctcttc gccaacaacc tgccgtccgc cgtcgttgag aaggtcacct tcttggacga 360

cgcgcaggtg aagaagctca agtccgtgct cggc 394

<210> 681
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014a10b1

<400> 681

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gcagacgtac accgtccgct ccgtgcggcc ggtggagggg gggcctgtct tcgtggcgtg 120

ccacgacgag gcctacccgt acaccgtgta ccggtgccac accactggcc cgtccagggc 180

gtacatggtg gacatggagg gcgcgcgcgg cggcgacgcg gtgaccatcg ccaccgtgtg 240

ccacaccgac acgttcctgt ggaacccgga gcacgtctcc ttcaagctcc tgggcaccaa 300

gcctggcggc acgccggtct gccacctcat gccgtacggg cacataatct gggccaagaa 360

cgtgaatcgc tcgccggcgt gagcggcccg ggcagctctg tggtctcgcc ggaactaaga 420

tcgatgtact actactacta tct 443

<210> 682
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014b01b1

<400> 682

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cgccgtcggc gactgcgacc acctcccttct cggtggtccg gcgcgtgccg tcggccatct 120

cgacggacgg ccgcctccgt cggacggcgc tgacgcagga ggagccgccc aactacgaga 180

tcgggtggaa gcgcaccaag aatctccccc tggagaagcc caaggggtgg gccatcgccg 240

actttctgga gaagctggag gggctgatgg agcgcgggcg gtacgggtcg ggcgcgctgc 300

tgggcacggt ggcgggcgtg gtgactgagc gcgcccggga ggaggcggag atcctga 357

<210> 683
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014b03b1

<400> 683

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gtgagcctgt ctaccttcgc gcccacggcc aggggcgacg tcctcgcgag gccgcaggtg 120

gccgccgccc gcgtcacctt cccgacggcg caccgcggca gcggcgccct ctcctgcagg 180

gcgggcgggc cggccacgcc gccgggcatc tccgacaaga tgtcggacag catcaaggag 240

gcccaggaga cgtgctcgga ggacgccgcc agcggggagt gcgcggcggc gtgggacgag 300

gtggaggagc tcagcgccgc cgccagccac gcccgggaca agctcaagga ctccgacccg 360

ctggagaact actgcaagga gaaccccgag accgac 396

<210> 684
<211> 454
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014b04b1

<400> 684

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gccaaatttg aaattagaag ccccaaacgt gtacagatca aattcgaaga aggcatcatt 120

ggcactccgc agctgaccga ttccatcgta ctgccagaga agtttgaatt atttggacag 180

aacattgacc tgagcccgtt gagcggcata tttacttcga tcgagaatgc agcgtcctcc 240

gtcgccaaga ccatcttcgg tcagccccca ctgaagatac ctttcaggag cgagagcgct 300

gggtcctggc tgctcacaac ctaccttgat gctgagctta gaatctccag aggagatggc 360

agcagcatct ttgtgctgtt caaggaagga agcgcactct cgatataggc caagcgtatc 420

tattctctga gtagaatttg acatggagaa aggg 454

<210> 685
<211> 424
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014b05b1

<400> 685

gttaggctat gcgaggggtc ggggaaggga agaggatgtc tctgggggcg gtgttccacg 60

gcgcgcagct gatgctggat ctggcggtgg ccgggatgtc cctcatgttc gcgctcggcc 120

tcttcgccgt cgtcaccacc gtgctctgct ccgccgcctt cctccaccac tccaaacccg 180

tcgcgtcgta gccgcgagct gcctcccacc aggcccacga ccccctcggc gcatcctaat 240

cgagtgagat tgctgttggg aggtaatacc ttcatttgca tcatttgccc agcagaaggt 300

gctccatatg ctactgctgc tagtactgtt gggagggaac tactgtagac gcaaagagta 360

ggaattgcac atatcangtg atagctggag gctcttgtac cttgtattac ttgtcatgtc 420

tact 424

<210> 686
<211> 510
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014b07b1

<400> 686

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aggatttgcc ggatgcccac ctggttcgag acctgggata ggtctgacac ctacaccacg 120

cttgctgttg ttgcagctgc tgcaacggtg ttcgtcgctt tcagggccta caagaccatg 180

aactgaagcc tgcgaagcaa tcctcaaaac aattccaggt tttgtgcacc aaggagagtc 240

tacctcaagt aatatactac ttgtccatag tggtaatgct agaacttaaa aagtagctga 300

tctggagatg gcgacgaaaa tctgttatgc gtaatgtcct catgcgaaac tcctaggttt 360

tgaagttttt gacgccttgg ctatatgtgt tgtagcaagg ctatagccct ggtgttctac 420

atgacgatgt tatgctcggt tggttggaat tgggatgttc tggagcatgc tggttttaaa 480

gatgtgcatt tgaaaatcgt gcatttctgt 510

<210> 687
<211> 124
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014b08b1

<400> 687

gctttgtatg tcgaacaaga acagaatatg cacacacaaa attgtattct gtccagaaat 60

cttgtgttct attgcaaaaa aattgcactt gaggaatgag gagacgagtg ccccgtttat 120

tctg 124

<210> 688
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014b09b1

<400> 688

attaacaata gtgttctgca tgattttgcc gaaaagtttc tgtaggaatg tttcagcagc 60

ctgctgacag cagcgattca ttgttcactt ggtcacggtg attcatcaca tcgtttatag 120

atagcatcaa tcatctgtcg gtttggggtt tttctccgtc cgtttgctgt acccatgttt 180

atctcttctg ggcttgctgt actcatgttc tatcctgttc tgggcttgct ggacatgtag 240

tgaagttgta agatgtaact tttggttgat tcaattgtga aaaatatata gaagcattct 300

tattcaca 308

<210> 689
<211> 259

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014c02b1

<400> 689

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ctcgaaccct tttagcagca ctgtggaatc gtattgtggt tttctgattc tctgttccct 180

tctccagact tatgcaaaga tcagatgagg tttacccatg tttggattct atatagtttt 240

atgtcctttg tcgagtcca 259

<210> 690
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014c05b1

<400> 690

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gcgatcagcc tcaagctgat catcacgctg gtcgccgccc ctgcgctggc gctggcgacc 120

aagagggcaa ccgagggcgt ccccggcgtc ggcaaggtag tgcacaaggt gcccaatgcc 180

atctatgccg ccgccatcac catggctgcc gtgctcatcc agagatccgc cgagggcgtc 240

gagtagaagc ggcatcgcgc cgtgaactgt agatgcacca ggcaaccagg gagggtgtaa 300

atgtgctgtg atttgccgtg tgaagggtga tgccctgtgg gacttatagt tttctgtaat 360

atcttcctgt ctgtgcttct tggtgttgct agcctggtgt gattcaaaaa gacagtattc 420

gctgcttggt gacatgat 438

<210> 691
<211> 187
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014c08b1

<400> 691

gatgtttagt ctatggatat gacgatgcag cggtgacaaa taaagtgtca cacaatgtcg 60

tgtgtgaccc gcccatacta gttgtttaaa ttctgaaata aaataaaata aagttgtatc 120

aagacaatgt tcatattggc attgtgtgga tgtcgatctg attgccatgc ttgcaagttc 180

ataagtt 187

<210> 692
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014c09b1

<400> 692

attaaaatta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa 60

aaacaaaagg cggcc 75

<210> 693
<211> 234
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d01b1

<400> 693

aatagtggtc ttaagccaac cgcaaggcaa acggggatca acgaaaagct acgcgaaaat 60

aatacatgca tccggtctct ctcaaaaaaa aaaaaaaaaa aaaaaaagac aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg gccc 234

<210> 694
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d02b1

<400> 694

ggtacaactt ttccgccttg gagctcggcc cgcctccggc cggccacctc tccatcggcc 60

tcgtgctcct ccgcctcgat ccgtccgccc catcgccata tccgcgccgg agcagccgga 120

tccgctaccc agaccaccaa ccaagagccg cctcttgcct gtcctacggt cgagaggagg 180

acgaccgaga ggagcgccca ttgatccgcc gcctgggccg ccttggagca cgccctgcct 240

ccggccgcca cctctccgtc agcctcgcgc tactccgaca tgatccgtct gccccaccgc 300

cggatccgcc gcccagacca ccaaccaagc atcggccctt 340

<210> 695
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d03b1

<400> 695

cattgcctgt ttcaccacaa cctcgtattc tagatttcca gatagacagg gtcagattaa 60

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taggccggcg gcgaggagga ggagcgccac cgttgccggt ggcagaagga ttgtgggtgc 180

cggcgtccgg gcatcggccg cggcggcgcc ggaggcggac tacagctcca acgtctcggt 240

gttccccatg gaggcctgcg acctggtcgg cggcgaggcg tgcgacgcgc agatgtaccc 300

ggagacgaag ctcggcgccg gcaccggc 328

<210> 696
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d04b1

<400> 696

ggtctccatt tcaaccgaca tggccgcctc cgccgacgag gaggcgtgca tgtacgctct 60

ccagctcgtc tcgtcgtcga tcctcccgat gacgctcaag aacgccatcg agctgggcct 120

cctggagacc ctggtggccg ccggcggcaa gctgctgacc cccgccgagg tggccgccaa 180

gctcccgtcc acggcgaacc ccgccgtggc ggacatggtg gaccgcatgc tccggctgct 240

ggcctcgtac aacgtggtgt cgtgcacgat ggaggagggc aaggatgggc gcctgtcccg 300

gcggtacggc gccgcgcccg tgtgcaagtt cctcaccccc aacgaggacg gcgtctccat 360

ggcggcgctc gcgctcatga accaggacaa ggtcctcatg gagagctggt actacctg 418

<210> 697
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d05b1

<400> 697

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cacgccggag gcggtttgcc aggacccggt tacgccggga aacagggaaa cgtgcaaaag 120

catctgcaaa agttttggct acaacccgga acaagcctac tgcaatcccg atcccactcc 180

gaggtgctgc tgcatctatt aagcgcagga aataacaatg ccactggagt ggcagatgat 240

ggatgacaaa gctagcaaac tcacttttat gtgtccattt cgacttatgt aaaaatcgga 300

acagatcatg gtccaggcct gtccgtcaat taataaagat tagaaaaagt ttcttttt 358

<210> 698
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d06b1

<400> 698

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acgctggccg ggctcctcgc cggcgcgctg gtgtcggggg tccaggtggc gatctcggcg 120

tccaacagcg gcggcgcgtg ggacaacgcc aagaagtaca tcgaggccgg cgcgtcggcg 180

gaggcgcggg cgctggggcc caaggggtcg gacgcgcaca aggcggcggt catcggcgac 240

accatcggcg acccgctcaa ggacacgtcc ggcccgtcgc tcaacatcct catcaagctc 300

atggccgtcg aggcgctcgt cttcgcgcca ttcttcgccg cgcacggcgg cctcatcttc 360

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<210> 699
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014d08b1

<400> 699

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agcacttcct tcctatcatg aatccaggtg gtgctagtat ctcgctaaca tacattgcat 120

ctgaaaggac aatccctgga tatggcggtg gcatgagctc agctaaagca gctcttgaga 180

gtgatacaaa agtacttgct tttgaagctg gacgcaaagg caaaatccga gttaacacca 240

tatctgcagg tcctctggga agcagagcag ccaaggcaat tggattcatt gagaagatga 300

tcgagtactc ttatgtcaat gcaccattgc agaaggagct tctggcagat gaagtcggga 360

acacggcagc attcctggtg tctcctttgg cttctgccat cactggatcg actgtttacg 420

tcgacaacgg actgaacacc atgggtcttg 450

<210> 700
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014d09b1

<400> 700

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gcgttcgggc tggccagcat tgagatcgtg ctggccgtgc tgctctacca cttcgactgg 180

gagctcccgg acggggtggc cccgagcgag ctggacatga ctgaggagat gggcatcacc 240

atccgaagga agaatgatct gtacctgcgt ccaactgttc gtataaaggt gtaggttctt 300

ttttcgaaaa ggagggttta ctccgatctc ggcctcttgc ataataaaca tgtgccgcat 360

agttgccttg caccgtcaat ggtgacgggt ttgcccgttg tactacctgt ttatcatgac 420

ttgaataaaa taagcatgag gtttgttcc 449

<210> 701
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e01b1

<400> 701

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cgccgtcggc cgcgccggca actacaccgt gcacggcatc acggagagcc cgggggggcat 180

ctgggacggc ctcaccatcg tcggcatcgt cgtcaccgga gtactcctcc gccgtcgcct 240

tcgcagctgg agcaggcacc tgttctctgg ttcccggccc catgaccccc agcaccgaga 300

cctaagggtg agggccgacc gggctgaaaa caagggcaaa cgtgagcagt gggcggagac 360

aaa 363

<210> 702
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e02b1

<400> 702

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tggtgtgttt actcatactg gggttggttc tggaacaggt gcaagtagaa ggcaagagtt 120

gctgcaagag caccctagga agaaactgct acaacctttg ccgcgcccgt ggtgctcaga 180

agttatgcgc aaacgtttgc aggtgtaaac tcacaagtgg cctaagctgc cctaaggact 240

tccctaaatt ggtccttgag tccaactcag atgaaccaga caccatggag tactgcaact 300

tgggatgtag gtcttcccta tgtgactaca tggtcaacgc agctgctgac gat 353

<210> 703
<211> 174
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e03b1

<400> 703

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ctaacattgt gataatatca gtctgggtaa tgttagatta agctgttgtc gccc 174

<210> 704

<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e04b1

<400> 704

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tgcttttatt ttcagcttct ttagtgtcct tggtggaagc tataatgtct tttcgtcata 120

atcaatgaag tgctgggtcc ttctgggccc ttgtagtggt ccaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaccaggag taaaaaaaaa aaaaaaaaaa aaaaaaaagg 240

ggggc 245

<210> 705
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e05b1

<400> 705

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ctgtaccgtg tggtgtgtaa ggcgtcgtct tgtgttgtga tgcgcctttt cctactgttc 180

tagttcccgt cctgatgtgc cttcctcgtc ttatctagaa ttagaatctc aaatttttctg 240

tctatgtatt tgtatctgta tcactctatg tgtggtgcca gctcttgata ttttctgttt 300

gttcttc 307

<210> 706
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e06b1

<400> 706

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gagaacctgc agagccatga taacaatgaa atctatgaga aggctgtgaa gattctcgag 180

gcttactgga tggaggagga agatgatgcg atgggggcaa ctatggaagc tcccacaggt 240

gttgcctttg actttggcca aggtggcaac cctgatctga acttgggctg aatacagatt 300

tgaccaatgg tggtaattcc cttgtcgctg cagttgtcac catttggtct agtcggtgtg 360

tggggtaagg tcatggttgt ggtgggtcca ataagctgaa gattttcaag gaagcaactg 420

gtcctgggta 430

<210> 707
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e07b1

<400> 707

gtcgccctgc aggcaaacca tggcgctctc cgtctcctcc ctcgcatcgg ccttctccca 60

cctctccctc ccctccacct ccgctcccca cccgcccccc ctcctgcgcc tccccaccac 120

ccgccgcgcc gctcgcctcg tcctcttcgc ctccggggcc gacgccgccg agccggtcct 180

cgaggcggag gcgcctgccg ccgacgacgg ccccgaggag gtgctcgcgg ctgaggccga 240

ggaggacgcg ctctccgggc tggcgctgcg caagtacgtg aagcagcggc tgcccggggg 300

attcgccgcg cagcggatca ccgccacggg ccgccggaag atggcgtccg cccgcgtcgt 360

gctccaggag ggcaccggga ag 382

<210> 708
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014e09b1

<400> 708

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tcatccaaag cgatctgctt gtttagtcag tctcgcgctt tacttatcgt tggtgagcat 120

tttgttgtag gtgtacaaat tagtcggtat gcaacagagc atgtgctggg cttggtcaga 180

tatggtgctg agctgcttgg ttgcccaggt tggcaggtta ttgccttcct tgcggcagtt 240

cgtagcccgc caacgtatga tcatcatgga gtaggagaag aattaaagag acagtatttg 300

tggtagtcta gccattgttg cttgctgctg gatgtttttt cttttcagtt ctaactgcct 360

gatactttga tatgcatcgg ataattatct g 391

<210> 709
<211> 348
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014f03b1

<400> 709

ttcgcgacta cgcgtccgcc cacgcgnccg cccacgcgtg cgatcagcgc ccctccgtcc 60

ctccctcctc ctggcgcgtc gtgatccatc cagcccaggg gcgagaagct agttagcggg 120

tgattaaggt cgccatgtcg gactccgagg accaccactt cgagtccaag gccgatgcgg 180

gggcgtccaa gaccttccct atgcaggccg gcgccatccg gaagggcggc tacctcgtca 240

tcaagaaccg cccctgcaag gtggtggagg tttctacctc gaagactgga aagcacggtc 300

atgctaaatg ccactttgtt gccttagata tattcaatgg taaaaagc 348

<210> 710
<211> 339
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014f04b1

<400> 710

gatgatcccc agcaangnng agctcgacag ctggaaggtt tctggcgatg tctcctttgg 60

ctctggagcc gcgctcaagg gcaacgtgac catcgcagcc aaggctggag tcaagttgga 120

gatcccagac ggagctgtgc tcgagaacaa ggacatcaac ggccccgagg atctttgagt 180

gacgcctgct gcatcgccag tcgcgttccc agaaaccttc ctgtcctcct tcgctgagtt 240

aacagtcatg taattttcgc gtgcattctg ctggggtgtt gtcctgggat agccccttta 300

cataataaat tgaatccccc ctgtgctgtt catctacac 339

<210> 711

<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014f06b1

<400> 711

ttctcgttat atgaaaacga aggcgggcca tataaaaaga tgatgaaatg ccgagccgcg 60

gcgggtgact ggaccaatgg atggtcctgt gttgttaagc tgatggtact aacccgctca 120

tcaaaggata atgacgaata tgcatgcatg catagcagct tgcggaccgg cgtcggctgg 180

aaatgctgcc atgttgtctc ccatacatgt ctctctcttt ttggttgtcg ggtaaggctg 240

catgctgaat tgtgtctagt agtatgtgta aattcctggt gccgtctgag ccttgtacaa 300

aaacgctctt gatagtgagt gttgtgcgat tctttttgta ctccagtggg tgat 354

<210> 712
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014f07b1

<400> 712

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tcgccgcgga attttactga attaccagca ccagagcaga gatctcggtc ggctcggcgc 120

caggggcaac ttccgccatg agcgccacga ggtcgtcctt cttcgggtcc aacggcaaga 180

agaagcccgc cgcatgcgcc cggaacccct tcgactccga ctcggacgac gacggcggga 240

tggtccagca gaggccgccg atgcgggcct actccgtccc gacccccgcc gccgcgccgg 300

tccccgccga cgagcggaac tccctcttcg tcggcgccgc cgcggcgggc cccgggccgt 360

ccgggttcgc gttctcgtcg 380

<210> 713
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014f08b1

<400> 713

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ggcgcgccgt gctgccacac tcgccattgc ccgacgccgt tctccgcctt ctcaaacaac 180

ccgcagcagg tgttgaactg ctcacagaag ccaccagctt cgtgagggat gccgaggaca 240

ggcccccctt cgactaccgt gattacagcc gctcgccgcc cgatgatgaa ccgagcaaga 300

gcaccggcgc cgcctccggg gcgcgggact tcgactacga cgactacagc gggggcgaca 360

agctccgtgg cgccgcctcc ggggcgcggg actttgacta cgacgactac agcggggccg 420

acaagctccg tggcgccacc gatgaatac 449

<210> 714
<211> 320
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1w189014f09b1

<400> 714

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ccaacgccgc cgacgcggtc tgcagcggcg tgggaatcct cggcatcgcc tgggcgttcg 120

gcggcatgat cttcgtgctc gtctactgca ccgccggtgt gtccggggga cacatcaacc 180

cggcggtgac cttcgggctg ttcctggcgc gcaaggtgtc cctggtgcgc gcgctgctct 240

acatcatcgc gcagtgcctg ggcgccatct gcggcgtggg gctcgtcaag gggttccaga 300

gcgccttcta cgtgcgctac 320

<210> 715
<211> 400
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1w189014g01b1

<400> 715

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tagcgtgcaa ggagtactat gatccaaacc gttcgatgct ggagttggtt tttgctccag 120

cagaggaatg gatcggacgg agtgacaccg aaatcatcga agcaactatg ctagagctag 180

ccaagttgtt tcctgatgaa atcgctgctg accagagtaa agcaaagatt cttaaatacc 240

atgttgtgaa gacaccgagg tccgtttaca agaccgtccc gaattgcgaa ccttgccgac 300

ctctgcaacg atcaccgatc gaagggtttt atctggccgg cgattacaca aagcagaaat 360

acttggcttc catggagggt gcggttttgt caggaaagtt 400

<210> 716
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014g02b1

<400> 716

agtaaatgca aaaacgaaga ggcgaacagc gcctatgagg atctcaacca gggcaagatc 60

gttggccgag ctgtagttga aatcatgtag tgctgactgc tgacgagatg atcatgtggt 120

tgaaaatctg ggtcaaacaa ataagaatat gccgcggcaa ctccgcgaac tcggtttgtg 180

ttgcagcatg gtctcgctcc ctgatttgtg ttggatgcaa aaaaatttgt tgattgaaag 240

attattgtgc tccaaaaaaa aaaaaaaaat aaaactcgcc ctctat 286

<210> 717
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014g03b1

<400> 717

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ctcgcttcag gggttctcac tgggaagtat agcaaaggga atatacccgc tgaaagccgg 120

tttgccctag ataactacaa gaacctggca aacaggtctc tggttgacga cacgcttaga 180

aaagtgaacg ggctcaagcc aatcgcttcg gagcttggcg tctcgatggc gcagctgggt 240

atcgcctggt gcgcgtcgaa ccccaacgtg tcgtctgtga tcactggagc caccaaagag 300

agccagatcg tcgagaacat gaaggccct 329

<210> 718
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014g06b1

<400> 718

taccgcttac acgtcgacgg gctacccggg ccggacgtac cggttctaca cgggcgacac 60

ggtgttcgcc ttcggggacg ggctgagcta caccaagatg tcccaccagc tcgtgtccgc 120

gccgccgtcg tacgtgtgca tgcagctggc cgaggaccac ccgtgccgcg ccgaggagtg 180

cgcgtccgtg gaggccgcgg gcgaccactg cgaggacctg gccttcgacg tgaagctccg 240

ggtgcggaac gccggcgagg tggccggcgc gcactcggtg ctgctgttct cgtcgccgcc 300

gtcggtgcac aacgcgccgg cgaagcacct gctcgggttc gagaaggtgt cgctggcgcc 360

cggggaggcc ggcacggtgg cgttcagggt ggacgtgtgc agggacctga gcgtggcgga 420

cgagct 426

<210> 719
<211> 303
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014g08b1

<400> 719

ttcncgataa ataacataaa aggggcagag aaggctctag agtagtctaa tacaaaagcc 60

atagccatgg cgaaactcat gtgcttatgt ttcatcatcc tcactattgc ggtagtcgtg 120

tcggctgacg aatgtgaggg tgaccgacag gaaatgatca agcagtgtgc aaagtatcaa 180

caatggccag caaatccaaa ggtaaatccg tcggacgcat gctgcgccgt gtggcaaaag 240

gcaaacatcc catgcctttg cgctggtgtc accaaggaga aagagaagat atggtgtatg 300

gag 303

<210> 720
<211> 175
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189014g09b1

<400> 720

cctacgcgac cgcgacaaac aaagacaggc gcatttgaag tttgaancca aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggggg 175

<210> 721
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h01b1

<400> 721

cgtggccaag cccgccaaga gcaaggcaag cagggagagg aagagggcca ggagggaggc 60

gagaacggca cagggcccga gggatcaggc accaacacca gcggctgcag cccccgagca 120

ggcggcaccg gcgccaaaga agg 143

<210> 722
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h03b1

<400> 722

agtattcgtg ggcggacgcg tgggcggacg cgtgggcgga cgcgtgggcg gacgcgtggg 60

cggacgcgtg gggctcgatc ctacctacgc tagcacacac tctgtctcac gctcgcgagc 120

gaactagtcc aggaacaatg gcgccgccca agaaggtgct gatgctgtgc ggcgactaca 180

tggaggacta cgaggcggcc gtgcccttct acgcgctggc cggcctgggc gtcgccgtcc 240

actgcgccgc cccgggcaag gcccccggcg acccctgcct caccgccgtg cacgacttcc 300

tcggctacga gctctacacg gagctccccg 330

<210> 723
<211> 130
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h05b1

<400> 723

cttcgcgtcc gcccacgcga ccgaatcgtt gtagtgatga caaataaagt ggtgtgcacc 60

atcatgtgtg accccgacca gtgctagttc aagcttggga ataaaagaca aacaaagttc 120

ttgtttgctt 130

<210> 724
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h07b1

<400> 724

taccggctag taccagttcg atgacaagta cggcgccaac gtcgacggct acagcccaat 60

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tcttatctgg gccgtcaccc tcgccggcct cctcggcggc ggcgtcctcc tcgtctacaa 180

caccagcgct ctcgccggct aagagagcat ctacgtgtaa cacagggccg ggtctctgct 240

tgcatgcacg tctctgtaat ctacatagct acctcctgtg aatgtatgca atcaacgatg 300

caaagtaatt gatccg 316

<210> 725
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h08b1

<400> 725

gttcatgcta cccgaggcaa tcgcaatagg tatggtacct accgacacaa gaaaaaaaca 60

cggtatattt catctaacgg atccgggtgg tattggtgtg atccatgatt gcccggagag 120

aggattccat ccacataaag cccctctgga tggctcacca atctacgagc attgctccca 180

cgtgtacatg aatgctgata caaagtttga tatgattgac ctccgagaac agtgagaggt 240

atcagtttca ttctgtcata gtttggcggc tgtacttgcg gcagttgagc aaattgtctg 300

ccttgatttc tctagtgcgc tgaagaaatg cagatactga tttaagtgat tgtacatagc 360

tattgtgtct atagagatat gattg 385

<210> 726
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189014h09b1

<400> 726

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ccttctggcg cgcggcgggg atgacctaca tcggctactc caacgtctgc gcggcgctgg 120

tgcggagctg cctcaaggag cccttcaaga ccgaggtctc ctcccgcgag aaggtccact 180

tctccctctc caagtgggcc gacgagaagc agcagaagcc cactgtgcgc acagatgatg 240

aatgaagatc gggtgccatg gtgattgatg ttttgagaag ttgttgagtc agggcttaag 300

aacttgagaa taaattcttg cggtgacaat ggatctattc cgatactatg ttgttatatt 360

tactaattgc tccttttcta cttgatgaac ctgaaccatg tgaaactcgt gtcttgtggg 420

gctcgagtga gcgtgttttt atgcgttata tcttccgatg cttt 464

<210> 727
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a05b1

<400> 727

gtccgtcatc ctcggcgccc tcaccggcga gtggctcacc ggggtcacct ggcaggacgc 60

cggcaaggag gagctggtgg acgggccgtc gtacctgggg cagccgctgg cgttcacgct 120

caccacgctg atctggatcg aggtgctggt gatcgggtac atcaagttcc accgcaacgc 180

ggagctggac ccggagagga ggctctaccc cgggggctcc tacttcgacc cgctggggct 240

cgcggtggac ccggagaaga aggagactct gcaggtggcg gagatcaagc acgcccg 297

<210> 728
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a07b1

<400> 728

tttcgctgta ctctcactct cctgccgcgg tgcgccgtac ctgctctcta gacaagatgt 60

cgtcagtcag tgcccgcgct cccgtggccg ctctccggcc agcggcgtca gcgtcgagcc 120

cccggttcct gggcgactcc ggccgcgtcg gcctcgccaa gtccacacgc cgcgacgtcg 180

ccgtccaggc caaggggtcg tggctccccg gcctcccctc ccctgcctac ctcgacggca 240

gcttggcggg tgacaatggt ttcgacccgc tggcgctggc ggaggacccg gaggacctgc 300

ggtggttcgt gcaggcggag ctggtgaacg ggcggtgggc gatgctgggg gtggcggaga 360

tgctgatccc ggaggtgctg acc 383

<210> 729
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a08b1

<400> 729

tttcgcctac tcgtacgcgc gaggcggcgg agcggcggac cagaatgctg gtccggagtt 60

tatcgatgct gggcacgata tgattctggc agcagatcat tcggcttcag atctgatccg 120

cggcatcgcg acggagtggg gggttgactt tgatgaggac ccggaagcaa tggttattga 180

ccacatcaat tatgcctcca gcgaggttga aggtgaccac accttgattg ctggcgatga 240

ccttattcag tcagatgtga tattgggatc caaaaagact gaggcttctg ttctgttccg 300

agggattg 308

<210> 730
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a09b1

<400> 730

tatcgattgg tcaaccatgt caaggcccga tccaggcaca cttattattg aacccactga 60

aagtgaaagc aaggctgaac tagacaggtt ctgtgatgcc cttatctcca tcagagagga 120

aattgcagag gtagaaaatg gcaaagcaga tgcacacaac aatgtcctga agggcgctcc 180

tcacccaccc caactcctga tgggtgacgc atggactaag ccatactcta gggagtatgc 240

tgcgttcccc gccgcgtggc ttcgtggtgc caagttctgg ccaacaacat gtcgtgtgga 300

caacgtgtac ggggatcgca acctgatctg cactc 335

<210> 731
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a10b1

<400> 731

gtcgattgag caccacaacc tcgtattcag atttctagat agacaggatc agattaacca 60

gaagatgatg caggccaccg ttgccttgtc ggccgtgctg actgtcgccg taaggggcag 120

gccggcggcg aggaggagga gcgccaccgt ggccgccggc ggcagaagga tgccgggcgg 180

tgccgttcgt gcatcggccg ccgcggcgcc ggaggcggat tacagctcca gcgtctcggt 240

gttccccatg gaggcctgcg acctggtcgg cggcgaggcc tgcgacgcgc agatgtaccc 300

gga 303

<210> 732
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016a11b1

<400> 732

cctacgcggc cgaaaaaaaa aaaaaaggga aaaaaaaaaa aaaaaaaacc aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaagaaa acaaaaaacc aaaaaaaaaa aaacaaaggg 120

gg 122

<210> 733
<211> 350
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsflw189016b05b1

<400> 733

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attgaagggt gttttccttg agagtggaac cccagaggaa ttctcgcttc ttccaaagct 120

cgcgagatca cagcccattg tcgacaaagc taagctcaag agtgcgactt cagtcgaaga 180

tgcattagag atcgcgagaa gctctcttta gtctggctct ttgtttaact agttgtcaac 240

acatatggcc tcttctgttt gggactgcag cttattttga aaagtcagga ctacgatgac 300

aataatgcgg ccatagtatc cgttctatgc ggngtttgta attttcctag 350

<210> 734
<211> 178
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b06b1

<400> 734

cgtactcttt tgtggacacg cgccaggacg ccacaaagcg atcagacgca tactcgatca 60

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ggcatgaatg gcaaggacgc agagctgacc actgatgcag ggtaccccta cagaaacc 178

<210> 735
<211> 285
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b07b1

<400> 735

cgtacgcttt tgtaaaaact ccgacgatcc accacaccct gcaatggcgt gcgctcacca 60

acgtgagcct gtctaccttc gcgcccacgg ccaggggcga cgtcctcgcg aggccgcagg 120

tggccgccgc ccgcgtcacc ttcccgacgg cgcaccgcgg cagcggcgcc ctctcctgca 180

gggcgggcgg gccggccacg cctgcgggca tctccgacaa gatgtcggac agcatcaagg 240

aggcccagga gacgtgctcg gaggacgccg ccagcgggga gtgcg 285

<210> 736

<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b09b1

<400> 736

ggtagtggtc tatgttatga gccacatctc aactggtggt ggcgccagct tggagttgtt 60

ggaaggaaag gagcttcctg gagtcgttgc acttgatgaa ggtgtcatga cgaggtcggt 120

gaccgtatga ggctaagctt catttgttgc atcttaattc ctttcatgta ccgttccaaa 180

cctgccatgt tgtcctccct cttttgctcg tcttcgacca ctcgaaatgt aagagaccaa 240

tgttttatag agaaatactg ggaactgttt gaataacacc cccagcaatt tgtgctc 297

<210> 737
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b10b1

<400> 737

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cctcttcgag gagggcctcg acaacgtcat caagaggcac acacgcctcg gcaccgcaac 120

aaggctggcg gtggcggcgt ggggactcaa gaactgcacc gcgaaggagg agaacttcag 180

cgacacggtc accgccgtcg tggtgccgcc gtacatcgac agctccgaga tcgtcaagca 240

cgcgtggaag cggtacaacc tcagcctcgg gctc 274

<210> 738
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b11b1

<400> 738

gcgcctacgc gttcgtccac gcgagcgaga gcaccgcggc gtctcgcccc aagagagcaa 60

gccggccgcc ttatcgccct ccgccgcgac gcttcatccc gtcaaggcca gctccggagg 120

ccggcgccga cgaactcgtg ccgcggcaag cgtgccggcg gcgcctgccc gtctgtggag 180

gccggcagtg gataagtgcc cgtggtggcc gtggtggcag ggttcttttt gcaaaatacg 240

aaacgttatc tcaccaggac aaactttaaa ttggactgcg ggttgaatat taagaaatag 300

agggactttt ct 312

<210> 739
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016b12b1

<400> 739

acacgccgac gccaaacacg ccgaccaatt aaaggctcgg gaggagcgac gaaggcccgc 60

cgc 63

<210> 740
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016c04b1

<400> 740

gcgaatctat tttcctacat agtacagcca tggcccccac cgtgatggcc tcgtcggcca 60

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ccaacggcgc tagcctcggc agcgtcagca acggtggaag gatcaggtgc atgcaggtgt 180

ggcccatcga gggcatcaag aagttcgaga ccctgtctta cctgccaccg ctcagcacgg 240

aggccctcct caagcaggtg gactacctga tccgctccaa gtgggtgcct tgccttgagt 300

tcagcaaggt cgggttcatc 320

<210> 741
<211> 188
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016c05b1

<400> 741

ggtagattta gttgcactgc cctccaaact gcgcgtgcaa cgccagtgcc aagtgtgttc 60

cttttgggtg tgagtgcaca atatgcatat acgctaataa gcagagtaca cccctccaac 120

aaacagatgg atctagctga tgatgtacaa ggacatgttc cctgaaataa atgtgattga 180

gacatatg 188

<210> 742
<211> 232
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016c09b1

<400> 742

cgtagttctc tgctttgaca ttaaaaaatt taaattacaa gatgagccat atatattcag 60

gaaatggagc tgcagaataa caacttcttc ttgagggaaa aagtagctga gactgaaagg 120

gggcaacagc agacgttgaa catgatgggg gcggcttcga catcgaatga gtacgagcaa 180

aatatgatcc attgtgatcc gagaaccttc ctgcagttca acttcatgca gc 232

<210> 743
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016c11b1

<400> 743

cctgatattt ctaaacgacc acacactcct attggagatg atgtggaatg c 51

<210> 744
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016c12b1

<400> 744

gcgcttattt tttccctcac gccactactc cctcctctcc tcaatggcag atctgcctcc 60

gtccctcgcc accggccccc cctccccgcc tccgacccca cccccgtacg ggccgtcgac 120

cgcgacgccg gctgctaggg ggaaggactg gaataaggtt cccgcggagc agctcgtgat 180

cgacttctgt gacccggagt tgcgtgagga cgccctacgc cagctctaca agaagcgaga 240

gatttttcaa gaccttgctc cactgctgtg gcactccttt ggcaccgttg ctgcactgct 300

ccaggagatt gtgtcaatct acccttcact ttcacctcct act 343

<210> 745
<211> 319
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d04b1

<400> 745

gcgcataatc ttttctactc cggccatctc tccatcgacc accgtagtac cacccctgca 60

ccccactcca acgatggcga cagcggcagc cggcggcggg aggggcaagc cgaagggcag 120

caagtcggtg tcgcggtcgg tgaaggcggg cctgcagttc cccgtcggcc gcgtcgcccg 180

gcacctgaag gtcggccgct acgcgaagcg cgtgggcgcc ggcgcccccg tctacctgtg 240

cgccgtcctc gagtacctcg ccagcgaggc cctggagctg gccggcaacg cggcgcgcga 300

caacaagaag acccggatc 319

<210> 746
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d05b1

<400> 746

cgtacgcgtt tgcggacgcg tggggtgatg aacgcaggcg agctcgggct gggcgcgctc 60

ggcgcgctcc tgcaggccgc cgtcccggcg ctggagtcct tcgcggggcc cgacggcgcg 120

ctgggccccg acgagctcgc cagggtgctg gggctcatgg gcaccgccag cgccgaggac 180

tgcgcggaga tcatcgcgtg catggacggg gacggcgacg gcgccgtcag cgtcgaggag 240

ttcaagctca tggctgacct gctctaggct cgagctacgt acgtagtatt gagctagcta 300

gagggcgtgc atatatgcag ttatgta 327

<210> 747
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d06b1

<400> 747

gataagactt ctaggaccgg aaacaagacc gtgccgaatt gcgaaccttg ccgaccactg 60

caacgatcac cgatcgaagg gttctatctg gccggcgatt acacaaagca gaaatacttg 120

gcttccatgg agggtgcggt tttgtcagga aagttttgtg ctcagtccat agtgcaggat 180

tctaagatgc tgtcccgcag gagccaggag agcctgcaat ccgaagcccc cgtggcttcc 240

cagttgtagc tagctagcgc gattcaattg tttagcattt tctatgtgtc attgtcacat 300

tgttgtagag tccaccagtg aattgagctg acaaccatac tggaacaaaa aggagatttg 360

taaaacaaag aagaactttg cagaagggca aaagtgataa agggatctta gatatc 416

<210> 748
<211> 221
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d08b1

<400> 748

gcgcttatct ttttcacaaa accaatcctg ctctgccccc cgatccccaa gagcatcacc 60

tgcaagcaat ggacgtttcg ggcaccggag ctggcgccaa gggcaagaag ggcgcggccg 120

ggcgcaaggc cggcggcccc aggaagaagt cggtgacgcg gtccgtcaag gccgggctcc 180

agttccccgt cggccgcatc gggcgctacc tcaagaaggg c 221

<210> 749
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d09b1

<400> 749

tttcgcttgt gcggacgcga gggcgcgcct gtggctgctc ccgctcaccc acccatggcg 60

acggctatga tggctgcagc caccacctcc tgctccccgc cccgagcgct cctcaagccc 120

gcggcctcct ccagccccgc gccgccgccc aggccgcagc cacggtcctt cctcaagcag 180

ctcccggggc tcgccgcgac ggcggcggcg gcggccgtcg cctacgtgcc tctcccggcg 240

ctggccgtgg agatggagaa ggctgcgctg ttcgacttca acctgacgct cccggcgatc 300

acgatcgagt tcctgctgct gatggtggcg ctggacaagc tctacttctc gccgctgggc 360

aagttcatgg 370

<210> 750
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016d10b1

<400> 750

cctcgtcttt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaggggg g 141

<210> 751
<211> 175
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e04b1

<400> 751

ggtctgcgtt attacttcgt gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg ggccc 175

<210> 752
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e05b1

<400> 752

tgtggttttt aggtgctctg aatgttgatg tgaacgaatt ccagaccaac ctggtgccct 60

acccaaggat ccacttcatg ctttcctcct acgccccagt catctcagct gagaaggctt 120

accatgagca gctctctgtc gctgagatca ccaacagcgc cttcgagcca tcctccatga 180

tggccaagtg tgacccccgc cacggcaagt acatggcctg ctgtctcatg taccgtggtg 240

atgttgtgcc caaggatgtc aacgccgctg tggccaccat caagacgaag cgcaccatcc 300

agtttgtgga ctggtgcccc actggtttca agtgtggtat caactaccag ccacccag 358

<210> 753
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e07b1

<400> 753

gcgcctacgc tttctcccac gcgtgcgact gaccacgcgc caccacgagc aacacccatg 60

gcgcgcaccg gcgccgccgc tgccctcttc gtgctcgtct gctgcctcct cgtcggctct 120

gtcccggcgc gcctccccgt cgagcttccg acgcaggtgg tacccgaagc cgttgacctc 180

ctggccaccg ccgagccgct tctggccaag cagttggcgg ctgccgaggc ggccaacccg 240

accaaagtcc actccatgat aacagaggaa gaggagatgg 280

<210> 754
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e08b1

<400> 754

ggcgagtcac cttctcaacc gaagcagact ccggagagca ggcaaggcgg agaccgagat 60

ggcgcgcggc gtgccggcgg ctaccaaggg cggcgcgggc gccgggaaga agaaggggtc 120

ggtcaccttc gtgatcgact gcaccaagcc cgtcgacgac aagatcatgg agatcgcgtc 180

gctcgagaag ttcctgcagg agcgcatcaa ggtcgccggc ggcaaggccg gcaacctcgg 240

ggactccgtc accgtcgccc gcgacaagag caaggtcacc gtcacctccg atggggcctt 300

ctccaagagg tacttgaagt acttgacaaa gaagtacctg aagaagcaca atgtgcgtga 360

ctggctccgg gtgatttcat ccaacaagga gcgcagtgtc tatgagctcc ggtacttcaa 420

ca 422

<210> 755

<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e09b1

<400> 755

cttagtttga tcatatcagt agaggaagta gcagcagtag catcggattc taataaccga 60

gtgagtctgt atcgtggtgt cgaagatggt agtaattagt ttgattaacc tgtctaatgg 120

atgtaccatt tgcgaaaa 138

<210> 756
<211> 280
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsflw189016e10b1

<400> 756

cctcnatatt atctggtgga ggcgctagct tggagctgat gtaaggaaag gagctgcctg 60

gagtcgttgc acttgatgaa ggtgtcatga cgaggtcggt gaccgtatga ggctaagctt 120

cattttgtcg cgtctcaatt cctttcatgt accgttctaa acctgccatg ttgtcctccc 180

tcctttgctc gtcttcaacc actcgaaatg taagagacca atgttttata gagaaatact 240

gggagctgtt tgaataacac cccccagcaa tttgtgctca 280

<210> 757
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e11b1

<400> 757

ggtcattttt ttggggttca catgccagga caataccaga atggatgtta caatcagctg 60

gcgtatactg caggccaagg atcacaccag aactggcgtg gggcgcaata cacacccggc 120

catcaggcga ggtattatag gaatggggtg actacaaggt acgagcctgt tgctggagga 180

ctccagaatg gaccggcacg ggcacgggac tcgcggtcgc aaggctcctc aagccgtacg 240

gaatggcgag gaagcagcca acatcagacc tgaccagaac tgttagtcgc agcaaagata 300

gcaatttgct gtttccattg gctgacaaaa tgtatcgatt tcgatttcat gatgtatgtc 360

atccttcata ctttagcttg tc 382

<210> 758
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016e12b1

<400> 758

agcgggtaac ttttcttcgg acaagattag tcagctgact gatattgtct acgtctgccg 60

ctctggatct gcagctgaca cgcaagttat ttcggattac gtgcgttatt ttctccacca 120

gcacacaatc cagcttgggc aaccagctac cgtgaaagtt gcatccaact tagttaggtt 180

attggcctat cagaacaaga gcatgttgca agctggaatg atagttggtg gatgggataa 240

atacgaggga ggccagattt actcggtccc tcttggtgga acgattctga ggcaaccatt 300

cgcaattgga ggatccggtt ccagttacct gtatggattg atggatcatg aatggaaaga 360

gggtat 366

<210> 759
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016f04b1

<400> 759

cgtttgcgcc accgacgagc gcttcgacga cgactacatc gaggccatga tcgccgccgc 60

cgacgccgac ctggacggct tcgtgcagta ccacgagttc gagggcctcc ttggccgcgc 120

agctaaggcg gtggcggaca gc 142

<210> 760
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016f05b1

<400> 760

cttgaccaaa gcccatcttc ttctccttga aatcttttg ggttcacaga tttggaggat 60

gtcttgcaac tgtggatccg gttgcagctg cggctcagac tgcaagtgcg ggaagatgta 120

ccctgatctg acagagc 137

<210> 761
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016f08b1

<400> 761

ggtgctggcc cggctcgttg ctcttggacg ccgttttctt tctggcggcg gcggccgtgt 60

cggaggccaa catcggcgag ttcgacgagt actggcagcg gcgccagctg gaggccagag 120

cccgcgcgga ggccacctac catcccaacc ccatcgaggt cgccaacagc ttgaaccgcg 180

ccgtccacag gaccgttcgg gaggagagcg gctcgaggag gaagttgctg ggactgcaca 240

agaagt 246

<210> 762
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016f10b1

<400> 762

gctgaaaaaa aaaaaaaaaa aaaaaaagaa aaaaaaaaaa aaaaaaaaac aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaacg gggcg 95

<210> 763
<211> 232
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016f12b1

<400> 763

ttcgcgctac tcgtccgatc agagcagatt aaggcagaga cacagagcag agcggataaa 60

ctcgagggag attcgatcat caccacacca accatgtcgt gctgcggagg caactgcggg 120

tgcggatccg gctgcaagtg cggcaacggc tgcggagggt gcaagatgta ccctgagatg 180

gacgaggggg tgaacaccac ctgcgagacc ctcatcatgg gcgtcgcccc ct 232

<210> 764
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g04b1

<400> 764

tcggttgtag cccgcgcgcc caagacagcg ccggggtggc cgttcccgcc cccttcgccg 60

cgccgcgtgc ggccggccag gtgcgcgggg ttcgtgggcc cggcggtgga gtcggcgtcc 120

ccgggcgcga gggcggcgac gctcgcgagc agccgcggcg ggaccgactc gtcactggcc 180

atctgccggg tgctcaacgg catgtggcag accagcggcg ggtggggcct gatcgaccgc 240

gccgacgccg tcgacgccat gc 262

<210> 765
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g07b1

<400> 765

gtcgattgca cgcgcgcgct cgccttcccc actacaggca cagccagcga gcgcactggt 60

ggtacaacga tggcgctggt ctcctcctcc tccgccaccg ccgtcgcggc gctccccagc 120

aatgggctgg ccggcgcccg gagctccttc cttggcgctg ccggcaaggc ggcggggtcg 180

cgcgcgtcgt tcgccgtgcg cgccgcggcg cccgagaggc ccatctggtt ccccgggagc 240

acccctccgc cgtggctcga cggcagcctt cccggagact tcggctttga cccctggggt 300

cttggatccg acccggagag c 321

<210> 766
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g08b1

<400> 766

ttttcggctt gagcaaggta tccagatgct taagatattc aaagagcatg tcagcaagac 60

ctctattctg gaagactttg ccttctatga gaaccgccag aagttgatgc aggagaagag 120

aataaaacaa cagcagatcc aaaagcaggt gtgggacagc agggctccga accctgttgc 180

tggagagaaa caacaggaag tcgccaacgg gaagccaaag gtatctgtac cgaacggtgt 240

caatggagag aaacagcagg atgccgtcaa tgggaagcca aagtcgcct 289

<210> 767
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g09b1

<400> 767

gatcctcggg gcgatgcagg ggataatccg cctaatggac ttacaaggtg cacattatga 60

ggtcaaagct tatgaagatt acaaatttct aaactcctcc tatgttcctg tgctccgaca 120

actggagtca gcaaacctcc aaaaattcta tttcgagaat aagcttgaga atgccaccaa 180

agatgctagc aatatgaagt tcaggaatcc caagtatctt tctatgctta atcacttgcg 240

attctacttg cctgagatgt acccgaagct gcagaaagat tcttttcttg gatgatgatg 300

<210> 768
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g10b1

<400> 768

ggtaattagg gcgtccctat gtgactacat ggtcaacgca tctgctgacg atgaagagat 60

gaaactctat gtggaacagt gtggtgatgc ttgtgtcaat ttctgtaacg ctgatgctgg 120

cctcacatcc cttgatgcgt aatgatgcgt atccatggtc tgagatttca cagggcaagg 180

tcgtgtctca cctttgcgtt caataaaatt ggatcccatc gagagtat 228

<210> 769
<211> 295

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016g12b1

<400> 769

acgagtaatc tttggggacg actctgtatt acaatttggt ggaggaactt taggacatcc 60

ttggggaaat gcacctggtg cagcagctaa tcgagtggct ttagaagcct gtgtacaagc 120

tcgtaacgaa gggcgcgatc ttgctcgcga aggtaatgaa attatccgag cagcttgcaa 180

atggagtcct gaactagccg cagcttgtga agtatggaag gcgatcaaat tcgagttcga 240

gccggtagat actattgata agtagataaa actaaagata aagaagagaa ggtat 295

<210> 770
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h04b1

<400> 770

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caccggcccc ggcgagcacc ccctcaagtt ctcacagatg ttccatttgc tgccagctgg 180

agggagcttc tacgtgcaga atgacatgtt ccgcctgaac tatggttaag gaagggcgac 240

cgctctggca gcaaagaact tgttcaggga tttatgttga aacaatgaac atcaaatgat 300

gatgctgcag actctttgtt tgttcgccaa cttgtgcaat ttatcgcaaa aaattgccag 360

acttgatagg catccaccag atcatctttt gtt 393

<210> 771
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h07b1

<400> 771

gttgtaacac ctggatagta aatctgaaga tctcgctcac agtatttaga tgatcaagat 60

ctctttattg ataatttcag ctgccacaat ttggacattg tgatgatgct gaaagatggt 120

tcttccctgt caagtgcgta tgggtgcaat acctgtcact gatctctgaa agcaacggtg 180

atgtagagcg ggtttgtcta catatgtgtt gaaatgtgca tcctttctca gattcatata 240

ttaacaaaga atgtctgtca ataccatctg gtaaagattg ctactccctc tgatccatat 300

tacttgtgat gacttctcat tatggctctg aaaagaagga ttagtatgcg ccatctgggg 360

cttgctctgc agcttttcat cctggacaga aattgtggat ggatgattag tatgcaccat 420

ct 422

<210> 772
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h08b1

<400> 772

tttccgaata cttgacagac aggagccgac atgatcaagg gcaagacccc ggaggagatc 60

cgcaagacct tcaacatcaa gaacgacttt acgcccgagg aggaggagga gatccgcagg 120

gagaaccagt gggcctttga gtagaggagc atctaggcga tgccaccgcc gcgctgaaag 180

aactacgcgt agtattcgtc atgtctgtat ttcagcgctc ttctttatgt ctgtcgtaat 240

gggttgtaat tatcctcgag tctatgaggt ggtgtcggtg aacatcttcg gtcagtggtt 300

atgtttgcga gaacaagaaa aacctatcgt ggtctgtggc catcgcttgt caaactgaat 360

cttaatcgtc aagtggatgc 380

<210> 773
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h09b1

<400> 773

ttttcgatta cacacactcc acgctcgccc aggaaaacca gcggcaagaa gcaagttcag 60

ttgaggttgg aggtcgagtg ggatcggatg gcgtcggcgc cggtggagtt cctgggcgcg 120

cgggagggcg gggtcggcgg ggacgcgctc tactgcgcca tcatcctgtg gctgtccgtc 180

atgtcgtgga tcatcttcac ctgcgtcggc ggcgacgacg gcggcaggcg ccggaggggc 240

cgccgggaca ccaaggtctt cgtcggcgcc gagcgc 276

<210> 774
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h10b1

<400> 774

tcggttgagg agagcgggcc tgcgtacgtg gaccgctacc ctgacctggg gccgtgcggc 60

gcgcccaccc gtacgtggcc ggggatcgga tggacgatca tctggcggtg ctggcgcgcg 120

gcgaggggtg gacggaggag cggcacgcgg cgttcctcga cggcgtggag cgctccttcg 180

tgcaggaggt gctcgtgggc gccgccggcg tcagcgagga gcggcgagcg tcgcgcaggc 240

tctgccaccg ggggccgccg cccgccggcg ggcgtggcca gctcccgctg gatcgccccc 300

tccctgaca 309

<210> 775
<211> 67
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189016h11b1

<400> 775

gcgactacgc gtgcgcccac gcgtgcgacc acgcgtgcgg ccacgcgtgc gcccacgcgt 60

ccggcga 67

<210> 776
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042a01b1

<400> 776

ctgacgtgtg ggctcggaag ctcgcattgc agcgctggct tgaagttatc gacccgtgac 60

accggtacgg gcacaacctt cactactact acgactgctg gctgaggtgc gaaagcaggg 120

agcctttctt ctactggctc gacatcggag agggcaagga gatcaacctc gaggaccgat 180

gcccgcggtc gaagcttctc agccagtgca tcaagtatct tggtccgaaa gagagagagg 240

aatatgaggt tgtgatcgag gatgg 265

<210> 777
<211> 259
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042a02b1

<400> 777

ctcacgctgc cggggttggt gcaagcagaa gctgggtgct tatgtatatc ctggctgtgt 60

cactagctgc ttgcaaagct ggagccagcg tcaagaagat tccgctgtac cagcacattg 120

ccaaccttgc tggcaacaag caattggttt tgcctgttcc tgcattcaat gtcatcaatg 180

gtggatccca tgctggaaac aagcttgcta tgcaggagtt catgatcctt cctactggag 240

ctgcctcatt caaggaggc 259

<210> 778
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042a04b1

<400> 778

ctcacttgtc cgcccacgcg tccgccaagc tccgactcct acgcccgtct cccccgagat 60

caggaggagc acgccgcacc ggagcgccga gacctcgaag ccttcgtctc cacctcggag 120

cagagatggg gctcacgttc accaagctgt tcagccgcct ctttgccaag aaggagatga 180

gga 183

<210> 779
<211> 260
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042a09b1

<400> 779

tcgttacgcg tccgatcaat ccatctttcc atccggattc atttcctttg agcagctcct 60

ctcctctcca ttgtttctct gctcgaagat gaagctctcc atgcagtcgc tggcccggaa 120

gctctccatc ccgtcgccca agcggggcaa gaagcagcag cagcagcagg acggcggcaa 180

gcgcggcatc tcccggagcg aggcgccgtc gttcgcgtct gcgtcctcct cctccaccac 240

ctcgttcttc tccgaggacg 260

<210> 780
<211> 240
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b01b1

<400> 780

cttacttgtg ggcgcctacg ctcttcgctt cctgcgccgc cgccttcccc cggtcttctc 60

gcttcagatc agttaacgta aatggctgac gcagaggaca ttcagcccct tgtctgcgac 120

aatggaactg gaatggtcaa ggctggtttc gccggagacg atgctccacg tgcagttttc 180

cctagtattg ttggccgtcc acgccacact ggtgttatgg tagggatggg gcagaaggat 240

<210> 781
<211> 128
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b02b1

<400> 781

gttggttcga agcctcgccc aagtccaagc gccgcccacg tttgcctcct cgccatggcc 60

tcccctgctt cgtctgcttc gcggacagag ctccgtcttc gtcaacgtgt tctcccgccg 120

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<210> 782
<211> 186
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b04b1

<400> 782

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tcagcaacta tgaagggcac caagctcgcg gcgatcctga tcctccaggc cgtcctggtc 120

atgggagtcc tctcgcacgt caacgccgac ttcttcccca agtgctgcaa caactgcagg 180

ttcttc 186

<210> 783
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b05b1

<400> 783

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gcggtatcac gccctacaac ggcggcggcg gtggctacaa cagcaactct ttctacggaa 120

acggcggcgg tgggtacaac aactcttctt acggcaacgg caacggcggt gacgggtaca 180

acaacgctcc cagttgggca tctcaggaca ccggcggccg gacgccgatt gtcataaaca 240

ccaggga 247

<210> 784
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b06b1

<400> 784

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aacggcggcg gtgggtacaa caactcttct tacggcaacg gcaacggcgg cgacgggtac 180

aacaacgctc ccagctgggc atcccaggac accggcggcc ggacgccgat gtacataaac 240

accagggagg tccacgttta tggggc 266

<210> 785
<211> 113
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b08b1

<400> 785

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tagatccatg gcaagtggat cccgtgcgtg ctagattcgg ctgtgttgcg ccc 113

<210> 786
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b09b1

<400> 786

tcggtcctgt acccggagct ggagtgggac tgccggctgt cgttggtgaa gagcatcaac 60

gtgagcgggc acaagtacgg tctcgtgtac gccgggatcg ggtggtgca 109

<210> 787
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b10b1

<400> 787

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gagctcacgg actgctgcac gcgcaatgga tttggaattc ccttctttat caagcagtaa 180

taacagaact gctgcgtcaa cagagcaggg ggtacgaaag gtagctgaga acactcatgc 240

atttgggctt cgacaacaaa gcaacggaat tgtgaataca caccattctg ctcagcattg 300

gtcccttaaa aatac 315

<210> 788
<211> 129
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042b12b1

<400> 788

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aggaggagcg ctctccttcg gccgcgcgcg tctgcgtccg ttccgcaatg gaggcgtgac 120

tcgcgagcg 129

<210> 789
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c01b1

<400> 789

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cgtgaagctc ttcaaccgct ggaccttcga ggatgttcag gtgaccgaca tctcgctgaa 180

cgactacctc gcggtgacgt ctatgaagta ctacactttt ctgccgcact t 231

<210> 790
<211> 185
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c02b1

<400> 790

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ccggtcgcaa gcaacacctt cagaggcagc ctctgcactt caaacactct tcaaaattat 120

caagaatgtg atagagaatc caaacgatat tcggtataga agactgcgta agaccaatcc 180

tcatt 185

<210> 791
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c03b1

<400> 791

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ttttgtattt tgtgaggagc cacagatgtt tacaaatact agaatgatgc atgataggtc 180

gcacacaaac tcttgaccag gtgcctctca catattctca tgtttgtact atattcttct 240

taaactgtta acacaatgag catgtacttg gttcatccaa gaacacaatg agcatgttct 300

tggtt 305

<210> 792
<211> 165
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c04b1

<400> 792

gtcgactaaa gtaagcaacg ccgccgaccc ctcgaggggt gaaacaaggc aaagggagag 60

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gtgccaaggc caaggcccca acaaataacg ttgatggaat gaaaa 165

<210> 793
<211> 213
<212> DNA
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<223> Clone ID: uC-tsflw189042c05b1

<400> 793

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gatgtgcatc tgatgacttc catttctcgt tttggttagg agctcccacg atgggatggt 180

tacaaactta aagtccaagt gactataaaa gaa 213

<210> 794
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c06b1

<400> 794

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atgtgcatct gatgacttcc atttctcgtt ttggttagga gttcccacga tgggatggtt 180

acaaacttaa agtccaagtg actttaaaag aaacaac 217

<210> 795
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c07b1

<400> 795

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gatggggcgg aggatcctca acgacgcgct gcgcacgatg gtgaacgcgg agcggtggg 179

<210> 796
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c08b1

<400> 796

ctccagggtt cgtttcccct cggagccgaa accctagccg tcgccgccga cgaccgcgag 60

caggctcaga tgggaggcaa gtgcccgcac cgcaaggtca aaaagcgccg tctcaactgc 120

aagcaggtgc gccgcggcaa gttcctcgtc aaagccgacg acgccgtcta cgacgagctc 180

gttaagctgg ccgaccaggg tatggattcc gaggg 215

<210> 797
<211> 166
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c09b1

<400> 797

ctcacgcgtc cgcacacttt ggagcttgat agtgagtgtg ctccagcgag tgacgccgcc 60

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aatataagtt ctttgaaggg ccggagaggt aactgtaggg gaaatg 166

<210> 798
<211> 92
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c10b1

<400> 798

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ccgatcctaa gggacggggt aaccccggca ga 92

<210> 799
<211> 129
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c11b1

<400> 799

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ttaacaagga tataggcctt aatgcaattg gttttcttcg attctgtgcg gcaaagctgg 120

cagaaggtg 129

<210> 800
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042c12b1

<400> 800

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atactatgac actggcattg agaccaactg ttagagacat atgtacatgt gcccattcaa 120

<210> 801
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d01b1

<400> 801

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gcgccttcgt gggcggcaac atcaccattt tccgcggcct gctctactgg atcggccagc 120

tcctgggctc cac 133

<210> 802
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d02b1

<400> 802

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tccatggccg cacttcacta gccgcccctc gggtattaag atttgtaaaa atcggcgaga 180

tctgggtacc cgtccgtctt attcatcctg ctatagcgta agtatacttg gcttgcactt 240

gtgcttcctg cccggtctgc attacgtttc gtctgttggc agtccttttg ttcgtgtct 299

<210> 803
<211> 184
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d03b1

<400> 803

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gaagagacga atttcagctc aggaaaccag atgggaggag acatgaaatg gatcgattaa 120

acggaaggga ccgggaccgg gatcgggatc gggagcgtga acattcccgc gagagggaaa 180

ggga 184

<210> 804
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d04b1

<400> 804

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gagttcttcg gtgttaaaga tgttcctaga catagttacc gctgtctggt tgtctgttgt 120

tgtgtgt 127

<210> 805
<211> 175
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d05b1

<400> 805

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gactgtatgg cacatgccta gacttgtatg ttgacccatg gaagtctaac atgga 175

<210> 806
<211> 161
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d06b1

<400> 806

gtttattaga tataacatgg gttaagcatg atggctcctc atggtggcca gcccaggtca 60

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gactgtatgg cacatgccta gacttgtatg ttgacccatg g 161

<210> 807
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d07b1

<400> 807

tcggtatcat catccctgat accaaagctc atcttcttct ccttgaaatc tttttgggtc 60

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agtgcgggaa gatgtaccct gatctgacgg a 151

<210> 808
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d08b1

<400> 808

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ccgtaaagcc tccgagccag ctgcctcccc gtcggccacg ctgcaaccag agcaagatcc 180

cgcccctggt cgcatctcag aatggcgacc ctgaggaacc tgaagatcaa gacgttgacg 240

tgcaagagga t 251

<210> 809
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d09b1

<400> 809

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gtggtgatct cggcgaagac cacccttggg gag 153

<210> 810
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042d12b1

<400> 810

tatgaggtga tttgggcatg gaaattcctg tagagaagat cttttatgca cagaaggtga 60

tgattttcaa gtgcaacatt tagggcat 88

<210> 811
<211> 160
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e01b1

<400> 811

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tccacaaatc catccggggt taggctgctg ctctgcttca ctgctctccc gtggtgactt 120

ccggtctcgg ctctcgcgtg gtaggtatgg gggcgggaga 160

<210> 812
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e04b1

<400> 812

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agcagacctt catcatgatc aagcctgatg gcgtccagag gggcctcatc ggtgaggtca 120

tcagccgctt cgagaagaag ggcttctacc tcaaaggtct gaagctccag aacgtggaga 180

agtcgttcgc cgagcagcac tacgccgatc tgtcctccaa gcccttcttc gctgggctcg 240

tggag 245

<210> 813
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e05b1

<400> 813

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ttcggaagaa gcacgccgac gtgcgcatca tgtacgccga ctactacacg cccaccatcc 180

agttcgtcct ccacgccgag aaatggggga tgctaaggca gaagccgagg gcgtgctgcg 240

gggcggcggg cgtgggggtg tacaacttca acctgacgtc caagtgcgga gagcccggtg 300

cgtacgcgtg cgacgacccc ttcaaccact ggagc 335

<210> 814
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e06b1

<400> 814

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ccggaagaag cacgccgacg tgcgcatcat gtacgccgac tactacacgc ccaccatcca 180

gttcgtcctc cacgccgaga aatgggggat gctaaggcag aagccgaggg cgtgctgcgg 240

ggcggcgggc gtgggggtgt acaacttcaa cctgacgtcc aagtgcggag agcccggcgc 300

gtacgcgtgc gacgacccct ccaaccactg gagctggga 339

<210> 815
<211> 103
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e07b1

<400> 815

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ccggatgccc gcttgcccag cgaggcggcc agatgtgtgg atg 103

<210> 816
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e09b1

<400> 816

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caccagatct ggatctcttc attccccttt gggctttggt caacgctttt gcttggtgag 180

catcgtcgac cggctgcagg ttgctcatgg tctagctacc tagaagacga gcagcagcag 240

caggccttgg cgagtctccg tgtccccttc cctcctttcc ccagcaagtc aagggaggaa 300

gaagggaagg aaggaagtta ggagaagctg ctagcggccg aagccttatc gctttgctga 360

ca 362

<210> 817
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e10b1

<400> 817

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gtaagtgtta agacatgaag aactctcact gcagcagttt gctcctggtg tgctcagttc 120

ttgtgctctg cc 132

<210> 818
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e11b1

<400> 818

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tgaaaaatct ggtcaacata ttgccaaatt tcttgatgca ctgccaagtg ccccatccct 120

gggaagtgac ccatggctct ctcgactgcc ttctgtttat gaagccattg ttatccctac 180

aca 183

<210> 819
<211> 199
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042e12b1

<400> 819

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cgatttggcc tgttggagg 199

<210> 820
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f01b1

<400> 820

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tgtgtgacaa tggcactgga atggtcaagg ctggttttgc tggtgatgat gccccaagag 180

cagttttccc tagtatagtt ggccgccctc ggcacacagg tgtcatggtt ggaatgggcc 240

aaaaagaagc ctatgtgggt gatgaagcgc agtcaaaaag gggtttcctg accttgaaat 300

accctattg 309

<210> 821
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f02b1

<400> 821

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gccaccaccg cttccagcct cctcaagacc tccttctccg gcgttcgcct cccggcggcg 120

gcccgcaccc cgtcctgcgt cgccaccccg cgcgccggcg ccatctgcaa ctccatcttc 180

tcctccaccc cttcctacga cctcaacgcc ttcaa 215

<210> 822
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f03b1

<400> 822

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catctcccaa gccggcaaca tcgccgtcta ctggggccag aacggtaacg agggcacgct 120

cgtcgacgcc tgcaacttcg gcctctacgc atacgtcatg gtctccttcc tc 172

<210> 823
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f04b1

<400> 823

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tgaacgccat ccatggctct gctttctcca ccattcatgt tactcctgag gacggctt 118

<210> 824
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f05b1

<400> 824

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aacagcttgc taatcggtgc cgttactggt catggtcgcc gtgagtttta t 171

<210> 825
<211> 126
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f07b1

<400> 825

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agggctcctt gctgcgagaa gatggggctc aagaggggcc cgtggacagc ggacgaggac 120

atgacc 126

<210> 826
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f08b1

<400> 826

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cttttgctgc tgggacggac agaagaagac aagcctgtca aggcatggag 110

<210> 827
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042f09b1

<400> 827

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tcaatgcccc gtctcattgg atgcttgaca agc 153

<210> 828
<211> 112
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g01b1

<400> 828

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agaaaaaaaa aaaggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg gg 112

<210> 829
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g02b1

<400> 829

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gcatgggcct acaccatacc atcgtggatt cttcagatcc ctatcacgtt tgttgaagtt 120

ggagtttatg ttttcaccac atattacgtc attggatttg atcccagtgt aagcaggttc 180

tttaagcagt atctgctgct ccttgcgatc aatcagatgt catcttcgct gttccgcttc 240

attgctggaa ttggaagaga catggttgtg tcccacacct ttggaccttt atcactgttg 300

gcttttgcag cattgggtgg ctttatcctt gcaagacctg atatcaaaaa gtggtggatt 360

tggggttact ggata 375

<210> 830
<211> 156
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g03b1

<400> 830

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ccgccgccat gccggccgcc gggaagcccc tcaagttcgt ctccgaacag tttgcgcaag 120

aaaggggccc gggtttcttc atggacagcg tgatcg 156

<210> 831
<211> 146
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g04b1

<400> 831

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tgtcttgcaa ctgcggatca ggctgcagct gcggctcaga ctgcaagtgc gggaagatgt 120

accctgatct gacggagcag ggcagc 146

<210> 832
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g05b1

<400> 832

ttactttcac accacgcggc cgacgcccaa tccgcgacca cgaagcgcaa cccgccgaga 60

tggcctccga ggcggcgaag gaggcggagc ccgacaaggg gatcctacag aggaggaggg 120

<210> 833
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g07b1

<400> 833

tcgctggcct ccatgacaag cgcgccacca gcgagtcccg gagatccaag cgccctgagc 60

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gccatgttcc tctgcgcaag cgcgagtctg cgagggtcgg gcgaccaccc cacccctgg 180

actcggaggg tgtgactg 198

<210> 834
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g09b1

<400> 834

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actccaactt tggtctattg tttccgtatg gtcatgaaga gttggctgtc tgtgaagatg 180

ttgaccaggt gcgtggtgta atggaaaagt acccccccata ccagtctatt tttgccaaga 240

tatcatatgg cgaaagccag atgttggaca aggcctttta tgaggaggaa gtaaagaggc 300

tgtgccagtc atttgaacag c 321

<210> 835
<211> 182
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g11b1

<400> 835

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cggactgctc gcgctcacca acttcactct ccagacaaaa ggccatgcct tcaaccccac 180

cc 182

<210> 836
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042g12b1

<400> 836

gcctccgctc ccacgccgcc gaatccagga cctgttctcg gattcaccgc gattgacccg 60

accaaaccct caggcgatcc ccggcacctc ctccccgacg ctttagccat ggcaggaatg 120

gcaccggaag gttccca 137

<210> 837
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h01b1

<400> 837

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gcgggagaga ggcgaccggc ggcggcgcgc gaggagggcc tacccatccc acccaccacc 120

ccgccggcca agatgttcgg ccgcgccccc aagaagagcg acaacaccaa gtactacgag 180

gtgctcgggg tgcccaagaa cgccgtccag gacgacctta agaaggccta ccgcaaggcc 240

gtcatcaaga accacc 256

<210> 838
<211> 156
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h02b1

<400> 838

tttcgttatc gacccccacg atttatggcc gcgtccctac cctgctatgc tgccccgtcc 60

cttgtctccc ccaagcacac accggcaccg cagtaagcca ccaacgcgcc aagagaaaca 120

ctcgagggag agagggagag cacgcgtgcg cgcgcc 156

<210> 839
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h03b1

<400> 839

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acttctctga gaatccgtac tttgaagaca gaaagcttac caagtcatat gcctttgctg 120

atgatggaac aaccacaata aatgccactt ccattaagtg gaaggaggga atggaaatta 180

atgggaatgc cattatgaag aaa 203

<210> 840
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h04b1

<400> 840

gtacctcttc tgttctcacc tcgcagcgcc gcaccacgga atcactccgg ccggcgagca 60

ccaccggcat ccaggcggcg gctaacggca agcggcgaac gtaggcagtt tcatgatggg 120

tactgaggac tctaaagata tgctgaagaa tgcggactgg aaaacagtga gtggtccagt 180

gattactgag tcaagccagc caattgttaa gaagcgtctt ccaaagaaaa tcagacaagt 240

ccccgagtgt tactttctgc cccggcgatc tctaccttct gcattg 286

<210> 841
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h05b1

<400> 841

gtcatcttgt accagcgcct tatgcggaat gggggccatt ctacctatca aacagctagc 60

aggcgagggg acccgttccc acctagagcc gatgcgcgac tccgtacagg gcggtggcgc 120

tgcagcagca ccagcgtctg gtctcctcct ccggcggcct ggcggcgacg ggggcccaca 180

ggtgcggcga gcacgacggg a 201

<210> 842
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h06b1

<400> 842

gtcataatga accagcgccg cagcccgcag cgcacccatc ctaccaaaca aacagctagc 60

aggcgaggcg acccgctccg acctcgagcc gatgccgacg ccgtacagcg cggcggcgct 120

gcagcagcac cagcgtctgg tctcctcctc cggcggcctg gcggcgacgg gggcccacag 180

gtgcggcgag cacgacggga cggtg 205

<210> 843
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h07b1

<400> 843

tcgtaacaga tgcttactca gagcaatagt cccgtccctc cagaacttgc taggcatgag 60

gcgtcgaagt ttaagccagg atcggttcct gatagacctc caagaagaaa tgacaccgtc 120

tatgcatctc actgaagcaa tctgttgcag aagaggcgga gatccttctt gggttcaatt 180

tagggccacc ttctactgtg tcgagattta gtacttatga 220

<210> 844
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h08b1

<400> 844

tttcgtcgca gtacgtacat tcgatacata gatccagtgc cggtgatcta tcaaaccggg 60

acgcacatac ggtgacagtg cttcagagac atattatcag aaatggagcc 110

<210> 845
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsflw189042h09b1

<400> 845

tttcgtcatt cgcatcgcca ccttcctccc tcctcccctc gccatctccg acccgacttg 60

cggccaatgg cggaccagct caccgacgac cagatcgccg aattcaagga ggctttcagc 120

ctcttcgaca aggatgggga cggttgtatt accaccaagg agctgggaac tgtcatgcgt 180

tccctggggc agaatcccac tgaggcagag cttaaagaca tgatc 225

<210> 846
<211> 98
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005a10b1

<400> 846

gaaacgggac gcaccctgta attaagcact aagcgcgggg ggtgtactgg ctacgcgcac 60

ggtgaacttt acacttgcca agggcctagt gcccgctc 98

<210> 847
<211> 176
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189005a11b1

<400> 847

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cggacgcgtg ggcggacgcg tggccgaagc tctaaaccct gaactgtttt gcatttgcaa 120

tccaagttgt tcatttgcta attctgaatt caatattgtg aactggtcat atnctg 176

<210> 848
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005a12b1

<400> 848

cggtctcgtg gttttaaaaa aaaaaaaaaa aaaaaaaaaa ataataaaaa aaaaaaaaaa 60

aaaaaaaaat aaataaaagt gagaagatat tataagttac atgattcgtt atgcatgatt 120

tctagggctt ttttttttt ttgttggttt taatttttt tgattggccg atattttata 180

acattttaat tgggtggctc ctgttttttt taaatttatt ttttttgac cactttctca 240

ctttgtcatt ttgtttatat tggacaaggt tcctatttta tcgccttttc ttttataatg 300

gtactctgat ttggatactg ggccgtctcc ctttttact ctttttttcc tcatttttt 360

tgtttaggtt atatataccg ttaacttgcc tgcgcccgac c 401

<210> 849
<211> 487
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189005b10b1

<400> 849

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catccattct catcgccttc attgtggttg tttctaactg ggggctggac gttggtggca 120

ccatcaccag agtattggtt tgcacgaggc cgctcctgtt cctcatcata acgaacgtaa 180

ccatcgtcat gtcgttgctg atggagaaca gggaccccaa tgcgaggggc agacaggccg 240

gcatcagcct tggttctgat ggcttagggc tgatgctgga gctcgggatg ctgctacaga 300

aggcgtctga agctatgctg atggacttca gcatttgcgc tgtcatcatg atctgttttc 360

tttgattctg aacaccctgg tcatgttttc ttggattctg aagagaattt agatagttcg 420

cggaagcgca tgtagaattt ctttttcttt tggtgctata tcgnactctt atgtctatnt 480

atccgat 487

<210> 850
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005b11b1

<400> 850

cccactcgtc cgctgactgc tttactttcc tcgcacaacc tgcagataaa atttgcctgt 60

taacacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaggggggg gccgaataaa aaaaaaaaaa atacaaaaca 180

catgaaaaaa aagaaataat ttttaaataa gagaacaaaa aaaaaggtgg gcgggcctgt 240

taaaaaacaa aaaattaa 258

<210> 851
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005b12b1

<400> 851

gcggttgtca gtttcggcgg cgactccacc accagcacca gctccagcac caggcgggcg 60

aaccaaccca gaccatggcg cccccgaccc gcgcgtgcgc atagcagacg tatgcggtga 120

ggacacaggg gcgtatgggc atgtcgcgcg cggaggcagt ggaatgtttc aagctcgggg 180

aaaggcccct agggggagat cgtcagtgcc gcccgtggtc cgagcgcgcg aagcccgctt 240

tcaaggtggt ggcgcactag cgattcatcc acatcgcgat tgttgtgggc ctgataaagt 300

ccgacccaaa gcccatactg tttcagtttc tcgaaccgat cggatcgatt t 351

<210> 852
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005c11b1

<400> 852

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caagagcacc gacggtctcc ccgtcaggcg tcggtccaac ggcgctagcc ttggcagcgt 180

cagcaacgga ggaaggatca ggtgcatgca agtgtggccc atggagggca tcaagaagtt 240

cgagaccttg tcttacctga caccgctcag cacggaggcc cttctcaagc aggtagaata 300

cctg 304

<210> 853
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005c12b1

<400> 853

cccacttcgt ccgtccacgc gtccgaagct actatgtttg agattgctgg gattctgttg 60

actgtattgc cggattaatt tgttgggtc 89

<210> 854
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005d10b1

<400> 854

ggcgctccag tggaccacgc tgtcgggcag tggcgccgag gacgttaggg tcatgaccag 60

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ctggctaccg gtcccgccta agcgcgtctt cgacttccta cgcgacgaga cctctcgcag 180

cgagtgggac atcctctcca atggcggcat cgtccaggaa atggctcaca tcgccaatgg 240

ccgcgaccat ggcaactgcg tctcactcct ccgtgtcaat agcaccaact cgaaccaaag 300

caacatgctg atcctgcaag agagctgcac ggacgcatcg ggctcctacg tcatctacgc 360

gccggtggat gtggtagcca tgaacgtggt gctcaacggc ggcgacccag actacgtcgc 420

tctcctgcca tcaggcttcg ccatcctgcc cgacggtcct gcagggacaa tgcacgccgc 480

ggcaggggca acccggc 497

<210> 855
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005d11b1

<400> 855

ggcagttcga cctttgcatg gcagcagtgg ctagctccaa ggggcgggtg atcgctggga 60

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cgtcggccta cgacaagaac gtggacgagc aggtgcgccc ggccttcgtg ccggacgatg 180

tgatcggcgg cgccgggagc ccagacaagt actggggccc tcacccgacc accggcgtct 240

tcggcccggc cgcggtcgac cccaagctgg ccgccagcct cgcgccggct gctggcgccg 300

cgaatggtgg cgcctccgtg ctggaccaga aggtgtggtt ccgcccgctc gaggacgtcg 360

agaagccccc cgtcgcctga tcgccgacga cgacgaccat agcccagctc tacatctcta 420

tcactccgct tagctgggct cgacttccta cttataatta catataatct gtagtggtgt 480

gctcgtgcta tagtacagac atggcag 507

<210> 856
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005d12b1

<400> 856

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caggatcctt gggttccttt tgctgctctt gcttttgatg taatggttat cagtgtaatg 120

gtaatcaagg cagattgtac tttgtggtag ctggtgaatt tagggctacg ttgggtggcc 180

ggcctgtgtt gaccgtttgg gatgctttat ggtcgtgttg gcttcgtttt gatcttttct 240

tttctgtttg aactcgtttg tagaactcgg tggttttcag taatgaaaat tggaaggggc 300

aagccctttt ttgat 315

<210> 857
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005e10b1

<400> 857

cggacgcgtg ggggagctcg tcatccacaa cccgggcgtc gaggaggacc ccgcctgcgg 60

cccgctcatc gacgccgtcg ccatccgcac gctctacccg cccacgctct ccaagggcaa 120

catgctcaag aacggcggct tcgaggaggg cccctacttc ctccccaacg cctcctgggg 180

cgtgctcgtg ccgcccaaca tcgaggacga ccactccccg ctccccgcct ggatgatcat 240

gtcctccaag gccgtcaagt acgtcgacgc cgcgcacttc aaggtgcccg agggcgcgcg 300

cgccgtcgag ctcgttggcg gcaaggagag cgcgctcgtc caggaggtgc gcaccgtgcc 360

cggctgggca tacc 374

<210> 858
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005e11b1

<400> 858

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ctgtattaca atttggtgga ggaactttag gacatccttg gggaaatgca cctggtgcag 180

cagctaatcg agtggcttta gaagcctgtg tacaagctcg taacgaaggg cgcgatcttg 240

ctcgcgaagg taatgaaatt atccgagcag cttgcaaatg gagtcctgaa ctagccgcag 300

cttgtgaagt atggaaggcg atcaaattcg agttcgagcc ggtagatact attgataagt 360

agataaaact aaagataaag aagagaaggt ataaataaaa aagaaacgaa at 412

<210> 859
<211> 501
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189005f10b1

<400> 859

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ggcaacgaca ctggtgctcg tggccgcgct cgccgtcctc ctcctcctcg cctccggccc 120

cgcgggcgcc acggccgccc ggacctcgcc caaggacgtg gcaacggcat ctcccgacga 180

gaaggtcgct gtggcggcgg cggaagacca cgagtgcgag atgatggccg gcgagaagca 240

gcgggatgag tgcatggcga ggaggacgct cgccgcgcac accgactaca tctacaccca 300

ggagaagcac aactagtagc cttcatatct gcgtccatgt aatgatgtta ttgttagtcg 360

gcactgcgtc tgcgtgttcg atctctatcc tatagcttcc tccatgaaca agggatcgat 420

cccaccgtgc atgcatgcat gcatggcgca attatgtatt gcctaaaata atttagtaat 480

tcgataatca aactggnntt t 501

<210> 860
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005f11b1

<400> 860

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cgagagtagc tagcctagtc tagggtttcc gtagagagga agggagaggg agatccattc 120

atggcggaga cggagtaccg ctgctttatg ggcggcctcg cctgggccac cgaccacaac 180

aacctacagt aggccttcag ccagtacggc gagatccttg acgccaagat catcaaccac 240

cgctagacgg cgaggtcccg cggcttcggg ttcttcacgt tgggcataga ggagaca 297

<210> 861
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189005g10b1

<400> 861

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cacaggaacc cgctcacgct ctggtaaacc aagcaaagcg cagtacttca acaatccaat 120

gtggcctggg gaggctcatt cgttgaaagt agagaagatt ttgtaccagg ggaaatcgcc 180

ataccaagaa gttttagtat tcgagtcttc aacctatggg aatgtccttg tgctcgatgg 240

aattgttcag ctgactgaca aggatgaatg tgcataccag gaaatggtta ctcaccttgc 300

actgtgctca attccatctc ctaaaaatgt tttggttgtc gggggtggtg atggtggtgt 360

actacgagaa atagccaagc atgactcagt ggagactata gacatatgcg agattgatca 420

gctagttatt gatgtttgta aagatttttt cccacgtctg tatgttggat ataa 474

<210> 862
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005g11b1

<400> 862

caccgcgtca tcttcgtaac cctctgctcg tcctcctctt cctcgcagca gcagcagcag 60

cccccgtcgc ccagatcgcc atggcggccg agccggagca ggcgccggcg gcgcaggagg 120

cggccgtgca catcgtgtac gtggaccgcc ccgaggacgc cgaccccgag gagttccaca 180

tccgcaccct cgcccccgtc ctcggcagcg aggagaaggc caggggcgcg gtcctctacc 240

actacaagca cgccgccagc ggattctccg caaagctcac caccgagcag gtcgaggacc 300

tcaagaagca accaggtgtc cttcaggttg tgccgagcca gaccgtccag ctccatggaa 360

atgagggagg acatgccaag acaacgcgca ccatgggcct tatgtgaaag ccctgagta 419

<210> 863
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005g12b1

<400> 863

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actctcgtgc tgctctttgg tgccgctccc agaactacag cagcttaatt tctctgtaaa 180

gtttttctgc gaatcttgta tctgcaggct tctagtgagg ctgtatcata gcacaggtgt 240

catgatctgc tggctaccac gcttggatat ctagagattt ggatttctca atagagcttc 300

tcatgggtaa aagaaaaaaa aataaacag 329

<210> 864
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189005h10b1

<400> 864

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ggcgcctttg agggcgtcgg gatggaaata atcgtacact ttggggtctg gttacacggt 180

gtacgccacc gccgccgacc ccaagagggg ttcctctggg caccatcgcc catatcgcca 240

tgggttatat ggtgggcgcc aacatcctgg gtgccggccc tttctccggg gggtccatga 300

accctgcacg ctccttcggc ccc 323

<210> 865
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006a02b1

<400> 865

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ctacacgcga acttgccaca aacgtaaata atattggacg gcaatttcga caattggtgg 120

tcccggacca tcaggggcga agactgggtg actcctatcg aaacgcaaaa gaatagcgcc 180

accgggatcg aggatttaag cttctgggcc gatgactgcg 220

<210> 866
<211> 158
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006a03b1

<400> 866

aagtggaaga tctgtgatgt gctagctaga tcgatcaccg tttagctgat cgatgaagag 60

ctacaaaata aatgggccat acatcatcat gtgtggccag cactattgca ccttggaaat 120

aacagaccta tgtttctgaa taaagctttt gtccgaat 158

<210> 867
<211> 517
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006a04b1

<400> 867

accagccagc cagcccatct catcccatct cactcgatca ccgcactctt tgtgctgagc 60

cgtttctgca caagagatca tggcgaagat gtcgtcgacg gccaccgtca cccgcgccca 120

cctcgagaac aagctcgccc tcgccaaacg ctgctccaga gaggcgacgc tcgccggagc 180

aaaggcggcg gccatcgcca ccgtcgcgtc tgcggtccca acgctggcga gcgtgaggat 240

gctgccgtgg gccaaggcgc acctgaaccc caccggccag gccctcgtcg tctgcaccgt 300

cgccgggatg gcatacttcg tcgcggcaga caaggccatc ctgtcgctgg cgaggaggca 360

ctcgtacgag agcgcccccg accacctcaa ggacacctcc ttcgctggcg ccgncgccgc 420

cgctcgtncc cgtccgccgg cattcttcag gccttgatct agcgtcctgc taatgtatga 480

tacgcacgct ngtgcccttg gcgtattcta gagacat 517

<210> 868
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006a05b1

<400> 868

ctcattgaaa gaagcaacat cttgttgaat cgtccctcta ccactttcct tgtcaaccag 60

agtaatggcc ccagccaaga acattggggc ggcatgaatc cttgtcattg tcatggtggc 120

aactgcatta ttaccgtcgt caagcgccac cctcaccaag tccggcgaga acctgttcaa 180

gtttgccttc gtcgcgctca tcgatacggt cctcgacgat gtcatcgcca ccaccccacc 240

agccaaaata cccgaagtac aa 262

<210> 869
<211> 486
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189006a06b1

<400> 869

gttcaacagt cctaccatac atacatttcg ccgccaagaa tatccaaggg atccaaccaa 60

gagagctagt agttaacaat ggcgtctgtg gggttcggca gcagcgtggc ggccgtggcg 120

ccggcgggga ggacgagcct tcgcccgcag cggacgcggc tggcggtgcc ggcggccacg 180

aggggcacgc cggctccggc caagaaggag aagagcatcc tggacttcat cgtcagcgcc 240

atcgtcaagg acgagcagga gttcatcgag accaacccgc tgctcaacaa ggtggacggc 300

ccggcgccct ccgccggtgg caccgcctcc aggaaggccg gcggcaccac ctccggcaag 360

aagcccgcgg ccggcagcga gggcggcggc gggttcaacc tcggcggcct cttcgccaag 420

aaaggctagg ctgaaccagc ccgcctaata cgtaagcgcg cgcttgggtg cgtgcttnca 480

tctcat 486

<210> 870
<211> 460
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189006a09b1

<400> 870

cagcatcatt acaactgcaa ccagatttag gattcatgaa acggatacaa caaatattag 60

gtcggaaaca ccagcgaaac cttcatggga tttatatact ccacccaacc ttggggttga 120

gaacagctat tctggggatg cagcttttga ttgatggaga ggtatggaag aaagttgtgt 180

atgttgacag gctggtgcaa ttgttcagat atgtaccacg cgaacaatta actatcccag 240

attttgtatt tcagcatgat ttggaggtga atggtggtag gggcatgatt gtggacccaa 300

gaacaaaaca tatctatcag agaccatctg gctgattcat gtcatttatg cagtccaaag 360

ctcatacttg ttgcttgtgc aagtctttgt ataattactc ctttggtgat atttctcgnt 420

ttcctttgta tcgaatttag gggttctatt cctttcattc 460

<210> 871
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006a11b1

<400> 871

ggctaactgg tgctacgcaa ccgtcgcgcc ccgtgcccgc tcctccacca tcgtcgccag 60

cctcggcacc cccgcgccct ccaactcctc ctccttccgc cccaagctca tcaggaacac 120

ccccgtccag gccgcgcccg tcgcacccgc attgatggac gccgccgtgg agcgcctcaa 180

gaccgggttc gagaagttca agaccgaggt ctacgacaag aagcccgatt tcttcgagcc 240

cctcaaggcc ggccaggcgc ccaagtacat ggtgttcgcg tgcgccgact cgcgtgtgtg 300

cccatcggtc accctgggcc tggagcccgg cgaggccttc accatccgca acatcgccaa 360

catggtcccc tcctactgca agaacaagta cgccggtgtt ggatcggcca tcgaatacgc 420

cgtctgtgct ctcaaggttg aggtcatc 448

<210> 872
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006a12b1

<400> 872

gcgacgacga ggagggcttc ttcctccccc ccggccaggc ctccgcgccg ccccccttccg 60

cggccggcga caccctggag gcactcaaga gtttggtgca gagcgccagc gtcgcggagc 120

ggaaccttct cgccgacgct tccaggatcg ccgagcggtg cggcaggacc tgcaagggca 180

aggcggagtg ccgccgcgcc gtcgccgacg gcctcagggc cctcggctat gacgccgccg 240

tctgcaagtc gcggtgggag aagaccccgt cctaccccgc tggggagcac gagtacatcg 300

acgccgtggt tggggacggg gcgaggctga tcgtggaggt gcacttcagg tccgagttcg 360

aggtggcccg gtcgaccaag gcgtaccgcg cggcgctcca ggcgctgccg ccgctgttcg 420

tgggcacgtc cgaccggctc gggaagatcg tgtccgtggt ggcggaggcg gcgccgcaga 480

gcatga 486

<210> 873
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006b01b1

<400> 873

ccccaccttc cgtcctcccc ccgtcgtcgc ggctccagct agggtttctc gccccccgccc 60

tacgggccca ccgacgaacc cgtccgccat gttgaagcaa ggaggaaagg ccaagccgct 120

caagcacgcc aaggtcgccg agaaggacta cgacgagaat gacctggcat acctccataa 180

gaagaaggac gagcaaaagg ccctgaacga gctgaaggcc aaggcaggcc ataagggtgc 240

gctgggagga tctgttctca agaagagcgg taagaaatga ggcatgccac ccatctcgaa 300

tacccagaaa atgataatct atctatctac ctatctgtga cgcgcttcac tatctgtggc 360

tgtgacagac taccttcagt tgtgttgagc attgtgcaat cgaccactat gtcgcttaaa 420

cctatggcat gtcagcagcc tcttatggta tctatgatac agaaggaccg agctaaaatg 480

acatgac 487

<210> 874
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006b02b1

<400> 874

atagttctca gctcctcaca ttctaccata caatcctctt catccttcac aaggaaccgc 60

catgggtctg tccgcgaagg tcttcgtggt cctcctgctg ctgctcgtcg ccacggagga 120

gcaggggga tcggtgcagg tggctctggc gagggattgc aagtcggata gccacaagtt 180

ccatggggcg tgcttcagcg acaccaactg cgcgaacgtc tgccagaccg agggcttcac 240

ccgcggcaag tgcgacggca tccactgcca ctgcatcaag gactgctaga tgcctagata 300

gccctggcta gtttgttctc gcgtactaga tgcatgattc catgtgatat tagctgaacg 360

atggtagatc tattatatgt ctatgtgcgt atgcgtgcgt tgatctgcga gtgctggtcc 420

tcggagattg catgaatgaa taaggggaat tgcatc 456

<210> 875
<211> 471
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006b04b1

<400> 875

gccccaacca atggcgtcca ccaacggcta cggcagcgtc accggcggcg gcctccccac 60

gcacacggcc acctccaagc cgcccgtcga cgacccgcgc caccagaagc agcgcctgcg 120

ccggcgccgc ggctgcctct gctgcgcgtg cctggccgtc accctcgtcc tcatcgccgt 180

cgtgctcctg atcctcttcc tcaccgtgct ccgcgtgcgg gacccgacga cgcggctcgt 240

ctccacgcgc ctcatcggcg tggccccgcg cctcaccttc ccggcgctca gcatccagct 300

caacgtcacc ctcctcatca cggtgtccgt gcacaacccc aacccggcct ccttctcctt 360

ccccacgggc ggccacacgg acctcaccta ccgcggcgcc cacgtcggcg acgccgagat 420

cgaccccggc cgcgtccnca gtaaggggga cgcggacgtg aagctggcgc t 471

<210> 876
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006b05b1

<400> 876

ccgaggttcg agtgggagct cttctagagg tcgggacggg cccgcccacc cgccacatgc 60

gtgtggccac acgttcattg gctcgatcag cctcgtctcg gtcatggcgc gcgtcaactg 120

tcacattgtt cccttcttct ctctccattc tttccttcca tctttgtttt ttctctttcg 180

agtgtatatt gatctcctca aaaaaggcaa cagctccagt gatatgattg tgcccagcga 240

ctcccaaatc cccacgaaga agatacacac actcatgatc tctatgcatg catcgggtgt 300

gctatgctgc aaataagtgg tggccttatg ttgatgaagg ttcggaattt ccacggcgaa 360

tttgtgtata gtattgtacg gtgtacatca aatcatcaat ttaccattat atgtgcc 417

<210> 877

<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006b07b1

<400> 877

cccacgtttc cggcttgaga gagcgcgcgc gagatggcag cctccatgat cacctcgccg 60

attgtggcgc cgacgagcct gccgtccctc tcccgccggg gctcctcctt cgccgtcgtc 120

tgcagcggtg gcaagaagat caaggtcgac aagcccctcg gactcggagg cggcttgaca 180

gtcgacatcg acgccaacgg caggaaggtc ggcaagaagg gcgtgtacca gtttgttgac 240

aagtacggcg ccaacgtcga cggctacagc ccaatctaca cgccggagga atggtctgaa 300

tatggtgacc gctacgccgg cggaacgacc gggcttctta tctgggccga caccctcgtc 360

ggactgctcg gcggcggcgt tctgctcgtc tacaacacca gcgctctcgc cggctaagag 420

agcatctacg tgtaacac 438

<210> 878
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006b08b1

<400> 878

cggacgcgtg ggcgttcgcg tgggaatcaa gctattacac atttgatcat gttcatgtat 60

ggtatcaaat caagatgttt tactgcac 88

<210> 879
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006b09b1

<400> 879

ctctgtatca gtcacttcag gctctggtcg atcacggtag cactagcttc agctagccac 60

tccaggcatt ttcttgcatc cacgacggca atggccaccg ctgatgtgca aaacccatcg 120

gccgcgctga cggaggaggc gcccgcggtg gagacgcccg tcgccgctga ggaggtcgcg 180

aagacggagg aggtccccgc gccggcggag accgaggtcg aggcgcctgc tgccccgtc 240

gaggtcgtgg agaccaagga ggaggcaccg gccgccgccg agacggagga tgccaaggag 300

gccgagccag cagctgcggc cgagccggag gccgaggcgc ccaaagagac agaggcgcca 360

gccgtggtcg agacagagac caaagaggcc gtggctgagg caaagccggc ggc 413

<210> 880
<211> 484
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006b11b1

<400> 880

cctcaccttc tcccttctct tcgtcgtgta cgcgaccatc atcgaccctc ggaccacggt 60

gcccggctac ggtccgatgc tcaccggcct cattgtcggc gccaacacca ttgccggtgg 120

caacttctcc ggcgcttcca tgaaccccgc taggtccttc ggtcccgcgt tggccatggg 180

agtgtggacc aaccactggg tctactgggt cggcccactg gtcggcggcc ccctcgccgg 240

gttcgtctat gagacagtgt tcatggtgac gaagacgcat gagcctctgc ttggttggga 300

cttttagaaa agcatgttgc tcgcatactt gcatttatat tttgcgatgt ataccagtgt 360

gtgtaaggca atagatgttg ctcgtagatt tttcaggaca agtgattcta gctagggtgt 420

caaaatggtt tgtagggagg tactacaatg gctggttttt tttttggtgg nggggnnggg 480

gggg 484

<210> 881
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006b12b1

<400> 881

agcagggcag cgccgtcgcc caggtcgccg ccgtggtcgt cctcggcgtg gcgcctgaga 60

acaaggcggg gcagttcgag gtggccgccg ggcagtccgg cgagggctgc agctgcggcg 120

acaactgcaa gtgcaacccc tgcaactgtt aagct 155

<210> 882
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c01b1

<400> 882

gcacgcccgc cttgtcatgg tcgccttcct cggattcgcc gtgcaggccg ccgccaccgg 60

caaggggccg ctcaacaact gggccaccca cctcagcgac ccgctgcaca ccaccatctt 120

cgacaccttg ggctcctctt aagcggtcgg tgggcgagca atttctgtca gctcggctgc 180

aaaatggacg aacgcgcgtc cgagtaacga acgtgctttt cgatttgtat atgaccagtg 240

atggatgaga gggtatcaca aagatccttt gatgagtaat gcaggtctga tcacatagga 300

gagctgctgg gacttggtga tttgtaaaat atgaaccaat ggtgacttaa tgcatgcact 360

tgtacatc 368

<210> 883
<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c03b1

<400> 883

cccattcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtc cggttctaga tcgcga 86

<210> 884
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c04b1

<400> 884

caacatctcc cccgggtact acgatggtcg atactggaca atgtggaagc tgcctatgtt 60

cgggtgcacc gacgccacac aggtgctcaa cgaggtggag gaggtcaaga aggagtaccc 120

tgacgcctat gtccgcgtca tcggcttcga caacctgcgc caggtgcagt gcgtcagctt 180

catcgccttc aggccaccgg gttgcgagga gtctggcaag gcctaaacta cgagttgaaa 240

caatggccta tgtatgaagg tcttttgtga acttaacttt tgtccaccac tctgctggac 300

gaccagagca tatttttcat tctatatggt ctgtgtgtgt atgtacgaac ataggttctc 360

gagcatgcat atgtaaattc tagaaccggc tacacatata caaaacctgt gtgatattta 420

ttatatacaa acacgcggac cattgtcttg ctgt 454

<210> 885
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c05b1

<400> 885

ggaagaaggg cgctccccgt cgattgccaa taggattctg tgggtttgct gtcaacagca 60

caatgctccg ggatcctcaa aggtaggaac cgcccaacta tggattctgc tatagtgcaa 120

tctggtggca gaggtggtct gtagcgagtc acgatttgac ctgatgtttg gtaaaaacga 180

gcgtaaaata aaaagcctta cagacaactg atgacggatc atggtctgga acttcccccc 240

ggaacctccc cagctgaaat acccctgtcc gatggccact gaggcaccac cttgtacatg 300

aaaagacctg cgacatagag atcctgccac cggaagtcct gtgttccatg caagacgttt 360

ctcttggcga gccatacgga aagatgatta accttgcggt gacacagaag ttactgatat 420

aaacttggcg atg 433

<210> 886
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c06b1

<400> 886

gaagggtcta gggtacctag ggtttatgat gtctcgttgt ttttgcatgc tagcaagtga 60

ctccgggatg ccagttttaa gatttcgctt gtgttgaaag atattattat tattactgct 120

tgtagcctac ctgggatacc gtcatatttt gctgattatg gaaccccttt tatcctgctt 180

<210> 887
<211> 137

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c07b1

<400> 887

aaatttttat gtttttcaaa tgaggagtgc taccggggaa taaatccagg aagaggtggc 60

ggcttgacag ggagtttagg acctttttgc ttgcattctc gtgtcttttg gcaaggagaa 120

aattatcatt tggaggg 137

<210> 888
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c08b1

<400> 888

catacttccc cctaatctcc accccaccca cagactgact cgcagcacac ctaccacgcg 60

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cgacggcacc gacgcgttca agccgatcta cgtcgccatc cgcggcaagg tctttgacgt 180

ataggccggg cgcggcttct acgggcccgg cggcgactac gcgctcttcg ccgggcgcga 240

ggccgtccgc gcgctcgcca agatgtccaa ggacgccgtc gacgtctccg gtgaccttat 300

ccggcccttt cgacaaggag ctcggcgtt 329

<210> 889
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c09b1

<400> 889

aaaaatttaa aaaatttttaa aaacaaaaaa taaaaataaa aaaaataaaa aaaaaaaaat 60

gcgggggggtt tattgaattc agccaccgtc ctgcgaggag aacggaaagg gctaaactgt 120

tctgtcacca cggtccattt atatagtgcc attgcggttt tgtcaactct gacattgctt 180

tgggttttcc ttcttcattt atctgtgttg catgctccta tttttatgcg tatgtccatg 240

ttgatgtaac gacatgtatc gagaaagcct gctcgaatgc taatgcaatg ggtgggtatg 300

tctatgcgca tgcgcatcat atatttatac aatgtgtggg gtatgtattc gggtaactaa 360

t 361

<210> 890
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006c11b1

<400> 890

cggggctgtg caccgtgcag gtgaaccacg gcgtcaccgt ggtgggctac ggcgagacca 60

gcgccgccgg cgacgagggg tccgggaagt actggatcat caagaactcg tgggggggcgg 120

ggtggggcga ggccggctac atgcgtctgc agcgcgacgc cggcatgccc accgggctgt 180

gcggagtctc tctgctcgcg agctacccgg tcatgtgatt cattctgcca ggtcatgtac 240

gtagtaataa gtagactcat gcatggagca tttgtgaagt gtaagaagat agcgagtata 300

aaaatacgaa tatctataca tcagtgtgt 329

<210> 891
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006d01b1

<400> 891

cccattcgtc cgggggctgc aagctgcagt tgacaggagt tgttgtatgc gtcgattaat 60

tgtcacttag tcaatctttt caattatctg tgttttgaga ttgtactgag tcgaggagga 120

taaggagtaa ctcttgacat tagtgtgaag tattttggc 159

<210> 892
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006d06b1

<400> 892

gcagttcgag gcttagcaac caaagctaca atcctgacga tgaagtggct gtcccaccat 60

ttggtgagcg gtatgaggcg aacgctgaat caggcgaaaa gtatacgggt atctttaaca 120

gggtgaggga tgataaacta tcgcccgact cttctgccag gcagcattca tctggcaatc 180

gcaaagacga aaataaggtg caacagacat gtccttgctg catactttga caagatgggg 240

atacaatcac agagagttct gataaacgtc ctgggatact tgtggaacaa attgtcgttc 300

ttgtgaagaa tttggcacca aactatatat tcatgtatac ttttcaatgc tcattagaca 360

ttactattgg cgtgggtgtg gacctatgat tgcatcgatc tacaatttat gctatatgct 420

tatttggaac atatatatga tgc 443

<210> 893
<211> 475
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006d07b1

<400> 893

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ccgtcttgtg gtcaccagta catctctgta cgaacgtcgc ttgttcttgg acgcccttgc 120

gaggcactcg cacatttgct ctctgccgac gtgccatggg acatgcggta atttgagcct 180

gaagtaaatc aaaagcaagc gtccggggcg gaacacagcg caaaaggtcg aggatgacga 240

cgaacatgtc gaacatgtcg tacgtggaca ccattctccg tctaccgccc tcgccgctgt 300

tgacgtaccc gacgcgcgcc ccggcgggac acgcgctgga ggagcctccc gcgcggcacg 360

ggccggcgcg gagatccaag cccgtgagga ttttccagag catgttccgg tctctgtcgg 420

acgtgacgga gccacgctgc ggngggattt tgacaccagc cccgaccggc gcaaa 475

<210> 894
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006d08b1

<400> 894

acggagctgt acccgcggtt ttcggggccg acaccttggc gtgcgacgag gggatgcgcc 60

aggcgatcga ggtcatgaac ggccaggacc tggacgggcg caacatcacc aggaacgagg 120

cccacaccca ccgctcccga ggtagcggtg gccgtttcag cggtggaagc ggtggcagtt 180

acagcggtca tcgctctgag ggcagcggcg ggggctactg tggcagtagt tgtagctaca 240

ggggtggccg cctacgtggc tgaggagggt acggcagcca tgaaggccgc tgcggctacg 300

gcggatacgc acgccgctac agtggaagac gcgaggcgcc ggcggtggaa actggaggga 360

gagaatggtg ggccccctcg ctgg 384

<210> 895
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006d09b1

<400> 895

gcgccttcta cgcggtctcc tacaagcctt tcttcgacgg cgccgtccag gccaaggggc 60

ccaacgacga caccaccacc gaagccacct ggtgctgcac cggccgccgc tctctcaacc 120

tgaggagcta cacccccctgc ttctaggcat tggaggacaa cgagggcccg gccccggccc 180

cgggcaagac cgacgaggcg gacgtggagc tgcacaggaa gaaacggctg ctggactaca 240

aggtgtacga cgtggagggc aaggtgaagg ggtcggtgcg gcgcagagtc aagcggatca 300

acggaaagtg ctcccgacgc acgtctacgg gtggtgacga gccggcgatc cgtccatgca 360

ggatggtctg cctacgtgtg ctgccggta 389

<210> 896
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006d10b1

<400> 896

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tggatacacg cctgctacaa atcagatcgt tatttgttaa ggcatatgat gagctcttgt 120

aatcctaatc tactacccac atgttacagc tgatgttatt atagaattag tactgtgcct 180

aagagatagt actctggtga gaagcaggca acacgtaata tgtgtgtcat ttgagaaaaa 240

tgaaacttcc aactttccaa ctgttcattg tatatgtaca ttggaaacac actatcttag 300

acaaatagat gattcagcag gatcaatgaa cgctcgcttt 340

<210> 897
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006d11b1

<400> 897

ggcggttacg gacgtcctag gggcggagcc tggcggaggg aggagtcgcg cggaggaaga 60

ccacactgac gctgaatcgg tattttcaaa tttggggtag tttggtcatt tcatcaagtt 120

tcacctggtc ggaaataata ccccaacgac aaataaatag gaacggaggg agtacatccg 180

tatgtttttc gtattaaaca aaaataaaca ttgctgaaaa taca 224

<210> 898
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006e01b1

<400> 898

cccattcgtc cgggacaatg tggaagctgc ctatgttcgg gtgcaccgac gccacacagg 60

tgctcaacga ggtggaggag gtcaagaagg agtaccctga cgcctatgtc cgcgtcatcg 120

gcttcgacaa cctgcgccag gtgcagtgcg tcagcttcat cgccttcagg ccaccgggtt 180

gcgaggagtc tggcaaggcc taaactacga gttgaaacaa tggcctatgt atgaaggtct 240

tttgtgaact taacttttgt ccaccactct gctggacgac cagagcatat ttttcattct 300

atatggtctg tgtgtgtatg tacgaacata ggttctcgag catgcatatg taaattctag 360

aaccggctac acatatacaa aacctgtgtg atatttatta tatacaaaca cgcggaccat 420

tgtcttgctg ttattaatt 439

<210> 899
<211> 475
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006e03b1

<400> 899

cccacgcgtc cggctactag cgcctaccac tgaggagtga ggctgccacg cccattcgct 60

agctagctac agacccatag tacaaacaat aatagagcaa ctgagcacac caggacacag 120

tcggttaagt actgtgacag ggagctaggt tcagttcacc acaaacgcct catctccaag 180

ccgagcacct cgccatgagc acggacgcgg acgccgtgcc ggtggccgtg gcgccggcga 240

agcgccctcc catcaacaag tacgccttcg cctgcgccct cctcgcctcc atgaactccg 300

tcctcctcgg atacgacatc tcggtgatga gcggcgcgca gctgttcatg aaggaggacc 360

tgaagatcac ggacacgcag atcgagatcc tggccggcat catcagcatc tactccctcc 420

tgggctcgct catggcggng ctcacgtncg actggctggg gcggcgctac accat 475

<210> 900
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e04b1

<400> 900

tcggtgatgc gcatctcggg gctcatctac gaggagaccc gcggcgtgct caagatcttc 60

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accgccatgg acgtcgtcta cgcgctcaag cgtcaggggc gcaccctcta cggattcggc 180

ggctgacctg cgcccgctgc tccaatctcc aatctccatc gactctgact ctgctagctg 240

ctgttctggt gctatggttt cgtttctgag tgcgtgcgtt gttggtccat cggtctgtgt 300

agttagtgga aggcgatgga tctgaatgca gtcagttcgt cagagtgcgt ctgttgatct 360

atcggtctct gtagtcagtt cctcagtgga aggcgatgaa tatgaatgca atggggtcgt 420

tggttctttc t 431

<210> 901
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e05b1

<400> 901

tcgcacatac agagaaaaag tgaccttgcc tcggccgccc gacgatcctt gcctgacgca 60

acagccatcc atctatccgt tgatctgttc atctcacaag agcatgcccc catggtgcgc 120

ctgttctacc tgtgtgt 137

<210> 902
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e06b1

<400> 902

tcgcaaaacc ccgattcctg ttcgtgtctc ctgtcctccc cggccgaccc cagtagctag 60

cttcgacaat gaacatcttg aaccagccca tcagccccgg cggcgcccac gcggccttcc 120

cggccgccgc cgccgccaag gacggcggca tgccggcgtc gctccgcttc gacgtcggcc 180

ccagcaccgc ccaccgcgcc ccgaggcggc agacgcagac gctgcttcgg gccagcagca 240

gtagctacgt cggcgccggg cacgccgacg aggccgccgt catcaagagc gcggagcagc 300

agaaggggcc cgtggtgccg ccgttccagc cggtgacgct caacttcctg cgctcgctgc 360

tggacaggga cagcatgacg tccatcgccg aggagggcgg cgagggcgcg ggc 413

<210> 903
<211> 192
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e07b1

<400> 903

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aggcgtgata cttgtcttga aactactgtt tgagttacta tctgagtcat aacctcatgg 120

atgatgtaat ggatagatgc atcgggcggt ggaatagact gtttaatgaa ttgtgtcgtg 180

aatcatggaa tc 192

<210> 904
<211> 454

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e08b1

<400> 904

tcgctccttt ttctctcgcc gccgccgccg ccgccatgtc agggaggaag aagacccgcg 60

agcccaagga ggagaacgtg acgctcggcc ccgccgtccg cgagggggag cacgtcttcg 120

gcgtcgcgca catcttcgcc tccttcaacg acaccttcat ccatgtcacg gatctgtccg 180

ggagggagac gctcgtccgc atcaccggtg gcatgaaggt caaagctgat cgtgatgaat 240

catcccctta tgcagctatg cttgcatctc aagatgttgc tgtaagatgt aaggagcttg 300

gaattactgc tctgcacatt aagctccgtg ctactggtgg aaacaagaca aaaactccag 360

gtcctggtgc tcaagctgcg cttagagctc ttgcacgttc tggcatgaag attggacgca 420

ttgaggatgt taccccggtc cccactgaca gcac 454

<210> 905
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006e10b1

<400> 905

tcgcccactc gtccgcccac gcgtccggcc agcctcggca cccccgcgcc ctccaactcc 60

tcctccttcc gccccaagct catcaggaac acccccgtcc aggccgcgcc cgtcgcaccc 120

gcattgatgg acgccgccgt ggagcgcctc aagaccgggt tcgagaagtt caagaccgag 180

gtctacgaca agaagcccga tttcttcgag cccctcaagg ccggccaggc gcccaagtac 240

atggtgttcg cgtgcgccga ctcgcgtgtg tgcccatcgg tcaccctggg cctggagccc 300

ggcgaggcct tcaccatccg caacatcgcc aacatggtcc cctcctactg caagaacaag 360

tacgccggtg ttggatcggc catcgaatac gccgtctgtg ctctcaaggt tgaggtcatc 420

gtggtgattg gccacagccg ctgcggtgga atcaag 456

<210> 906
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006e11b1

<400> 906

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aagctttccg gcgacgagct tctgtcggat tcgttcccgt acagggagct ggagaacggc 180

gtgctctggg aagtcgacgg ccattgggtc gttcaaggag cagttgatgt ggacattgga 240

gccaatccct ctgctgaggg tggtggtgat gatgagggtg tcgatgacca ggccgtgaag 300

gtggttgaca ttgttgacac cttccgtctt caggagcaac ctgcttttga caagaagcag 360

tttatctctc acatgaagcg ctacatcaag aacctctctg ccaagcttga aggggatgac 420

ctagatgttt tcaagaagaa atgtgagtct gccacaaagt atcttcttag caagctcaag 480

gaccttcagt ttttttgtgg cgagagcatg catg 514

<210> 907
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006f02b1

<400> 907

tcggtcctcg tctcctctct cctttcccca acccaaacca ggagcgccct ccctccccca 60

gccgtccgcc ccctccccac ccaggaaacc agccatgaag ggggccaaat ccaagggcgc 120

cgtcaaggcc gacaccaagt tggcggtgaa gagcaagggg gcggagaagc cggccgccaa 180

ggggaagaag ggcaaggccg gcaaggaccc caacaagccc aagagggcgc cctccgcctt 240

cttcgtcttc atgggcgagc tccgcgagga gttcaagcag aagaacccca agaacaagtc 300

cgtcgccgcc gtcggcaaag cggacggtga gaggtggaag agcttgagcg aatcggagaa 360

ggcccccctac gtggccaagg ccaacaagct caagggcgag tacaacaagg ccattgccgc 420

ctacaacaag ggcgagagtg ctgctgctgc tg 452

<210> 908
<211> 520
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006f03b1

<400> 908

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tcaacttcgc agaatcgtcg gcggtcgtct cttcctctag ttagatcctt cgagagcaat 120

gggaggaggc aatgatggtc atgggtaccc acccggtggc caggggggat accctccggc 180

agggtacccg ccgcagcagg gaggttaccc tccacagcaa ggaggttacc ctccacagca 240

aggatacccg cctgcacctg gagcttaccc acctgcacct ggggcatacc ctcctgcacc 300

tggggcgtac cctcctgcac ctggagcggg aggccctgac ggggagaagg ggctcctctc 360

caacatcatg catggtgttg ccggtgctca tggtggtggt catggctacc catctggtgg 420

ccacgggtac cccccgcagc agcatggata ccctcagcag ggctaccctc ctcagcatgg 480

ctacccaccg cagcagcatg gctaccctcc acagcagcat 520

<210> 909
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006f04b1

<400> 909

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ctgggctccc tgggctccct ggcctgccgg ggctccctgg gctccctccc gttcccaaat 120

ccaccgccac caataagtct ccatgatcgt ctatggtgta ctacgtgctg gctaacatgc 180

atggctgaag ctcaactact tgtgggttta gacttgcagc tagcacgcac cggccggaag 240

aaaatcaccg gcgtttcgct caagcgtctg taccaactat cctggcgtgt gtacttcctt 300

tcagttaaaa ctatcgtatg tatttccttt cggtccacgt 340

<210> 910
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006f05b1

<400> 910

tcgggaattt tgaataaatt agccaatcaa taaatatagt tgatttcaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaattgg gggggccctt ttaaggaaaa aaaattttcc ctccctgggt ggccaaagaa 240

aacctttttt ttaggggggaa caaaaaaaaa ataacggggc ctatttaaaa aaacgggggga 300

gcggaaaaaa acctggggtc cccaaataaa ttgcttttgg aaaaaaacct tttttcccaa 360

gttggg 366

<210> 911
<211> 513
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006f06b1

<400> 911

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tcggagcaga ggctctccct tcaccttcgt cttcctccct ctcggcagtt cgacctttgc 120

atggcagcag tggctagctc caaggggcgg gtgatcgctg ggagcctcgt ggcgcgcgtc 180

ctcgccggca aggccaacgc ctccccgagg agggcggtgc acgcgtcggc ctacgacaag 240

aacgtggacg agcaggtgcg cccggccttc gtgccggacg atgtgatcgg cggcgccggg 300

agcccagaca agtactgggg ccctcaccca accaccggcg tcttcggccc cgccgcggtc 360

gaccccaagc tggccgncag cctcgcgccg gccagcgccg ccaagggcgg cccctccgtg 420

ctggaccaga aggtgtggtt ccgcccgctc gaggacgtcg agaagccccc cgtccgctga 480

tcgccggcga cgaccagtcg accatagccc agc 513

<210> 912
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006f07b1

<400> 912

tcgagctttt tgaaatagat cctgactaca cggtgcttgc atttgctgac atgatgagga 60

agaagatctc gatgcctgcc catctcatgt acgatggtga ggacaacaac ctattcgagc 120

acttcagctc ggtcgcgcag cggcttgggg tctacacggc gaaagactac gccgacatcc 180

ttgagttctt ggtccagagg tggaaagttg cagatctcac tggactgtcc ggtgaaggaa 240

gacggtcgca ggactatgtt tgcactttgg caacgagatt caggcggctg gatgaaagag 300

cgcaggcaag ggcgaaacag gggcctgtgg ttccattcag ctgggtctac gaccgtaaag 360

tgcagctcta ataaagagga aggaacacaa ggttaatgag actgcatcca tcctattatt 420

tcgtgtttcg ggtcagtgta ggttttccta atagcagggt agaatgtttt atgtgct 477

<210> 913
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006f08b1

<400> 913

gctagttggc ttcatcgagc gacaatggcc tccgaccgcc tcagcgccct ccgggccttc 60

gacgacacca aggccggcgt caagggcctc gtggacgccg gcgccaccgc catcccggcc 120

attttccacc acccacccga cgccttcgcc ccgtccactg tcgccaccga cgtcgccgtt 180

ccaatcgtcg acctctcctg cgagcgctcg gccgtggtcg gcgcggtgag ggccgcggcg 240

gagacggtgg gcttcttcct gctggcgaac cacggcgtgc cggaggcggc catgtcgggg 300

atgctggcgg cggtgcggcg cttcaacgag gagccggcgg aggccaaggc gccgtactac 360

acgcggggcg cggccaggcg cgtgcgctac agctgcaacg cggacctctt ccagacgctg 420

gtgggcaagt ggcgcgacac cgtgtacatg gacgacgcgg a 461

<210> 914
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006f09b1

<400> 914

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caaggagctc aggtccctct tctacaacct ctcctacagg cgccgcctct cgcacgacca 180

cgaggagcgc cagaggttct ccgagaagat cattgtcctg ctcctcactg tcgatgcgct 240

cgagggacct gacttcatgg tgaggacggc gaagaaatct atgctggagg aactggagag 300

catgctggag attgtggacc cgcagccacc agggaagcag aggtcgttta gccgccgcaa 360

gttcgatctt ccagagggcg gagcgattcc gaacgagaaa actgcaggcg tgaacaatgc 420

tgtcagggtc atcaacactg gcaagggcaa gcagtaggca cta 463

<210> 915
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006f10b1

<400> 915

gcgaactcaa gcctcagaga acaccacgca cagcagcacc accaccgcca ccgccaccac 60

caggaagcgc agtagtcgac gcagctgagc caatggcccg ccgcacggcc ctcatcctcg 120

ccgcgctcct cctcgtcgcc ctggccgtcg cgccgttggc caatgccaag aaggccgcca 180

aggaggagaa ggccttcgac gccccctcgg ccgacgcgcc ggccgtcgac tcacccgcgg 240

aggggccctc cgatggaccg gcggctgccc ccgggcctga gggcatcgtc ggcctctcgc 300

ccgacaacga cgacaacgac gacaagtgaa cccgagtgca tgccctttgg aaggatccgt 360

tcgatgctga tcagatcgtc cgcatggatt ttagtttcga gacaataata atactactac 420

gtataggcct gttgccctgc taggaggatg ccgtcgtaat tcaaattttt ggttttccgt 480

cttt 484

<210> 916
<211> 177
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006f11b1

<400> 916

cccactcgtc cggtcaccat ggttgtgaac tctcctccct cccctcttct gctgttgaga 60

cagcctgcca tttctgttgt tgagacagcg tggtgttttg gttctacagt atgatattag 120

caatgagtcg ctgtacatat tattgtgagt tggaagatca tatcatgtgg tttctcc 177

<210> 917
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g01b1

<400> 917

tcgcagttta gatgcagatc ttcgtcaaga ccctgacggg caagaccatc acgctcgagg 60

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cgccggacca gcagcggctg atcttcgccg ggaagcagct ggaggacggg cgcacgctgg 180

ccgactacaa catccagaag gagtcgacgc tgcacctcgt gctccgcctc cgcgggggca 240

tcatcgagcc ctcgctccag gccctcgccc gcaagtacaa ccaggagaag atgatctgcc 300

gcaagtgcta cgccaggctg catccaaggg ctgtcaactg ccgcaagaag aagtgtggcc 360

acagcaacca gctgaggccc aagaagaaga tcaagaacta gagctcgtaa aaccgttatt 420

gccgctttca ttgtctggat aaatctgtag acataaaatg tttctgggta tcaatttgct 480

gctcatgtca ggatgatgaa ccttg 505

<210> 918
<211> 260
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g02b1

<400> 918

tcggcgtgtc tacccgctga gtttaagcat aaaatatcag tgggtgtata atataaatat 60

aataaaaaaa taacaagtta agctaaaaag attaaaaaat gaaccaacaa catatgcgac 120

tgaatggaga ccttctttgc ccatgaaaat gaaaattttt gcttgctgta ccaaggtgat 180

cgggggggtgt ggtttataat agtaccatat aaactcattg tgctacaaca agaatattgt 240

gtagtgatgg tgtaatacac 260

<210> 919

<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g04b1

<400> 919

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accgctctcg acttcatgcc cgccgagaag gccccccaag ccggcaccgt cgccatcgat 120

aacaatgccg ccggtgccgc cgtgccggtg cagcagcagc acaggagact ggaggggaag 180

gtggccatcg tcacgggcgg ggcgcgcggg atcggggagg cgatcgtgcg cgcgttcgtc 240

cggcacggcg cgcgcgtggt gatcgccgac atcgacgacg cggccgggga ggcgct 296

<210> 920
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g05b1

<400> 920

tcggctgtgg gttttccttc tccatttatc tttcttattt ggtcctaaga atatgtgtat 60

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ggctatgtat atgcacggac gcataatatt atacaatatg ttgactatat acgttctaat 180

ggtaaccagc ataacaaaca aatgaaaaag aaccaagaga tggaacttaa acatgaa 237

<210> 921
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g06b1

<400> 921

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aaactcaatt gatggtttgt agcgtgtata tcccctgctg ctatggcagc ttgaactgca 120

ttttgggaac atgacgattc caatatt 147

<210> 922

<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g07b1

<400> 922

tcgctggctg gccgactgcg gtgtgctacc ggcgatgaga tccaggagga ggtggcggcg 60

gacagggagt cgaggacctt tttgcttgca ttctcgtgtc ttttggcaag gagaaaatta 120

tcatttggag gg 132

<210> 923
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g08b1

<400> 923

tcggttctta cacattctta ttcttatatt ttcattctta tcctttgcat aggtgaagtg 60

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ttgtaggcag tagtaggcat atctggcttg tagtatactg taatgattat aatagactaa 180

tgtattgttg ttttggatca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaatggt cgtctattta agggggggcgg gttttaaagg 300

acttcaaatt tacgaacgcg tgcttgctaa gggtaacttt tttataatgg cccgcaaatt 360

tatttcactg gc 372

<210> 924
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g10b1

<400> 924

tcgcgaacac gagcaccaag gcgatggcga ctgctctcaa ccgcggcctc cgctccggga 60

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ccggtgtgaa gaggatgtca gggcatggcc atgatgagcc atactacctc cacgccaagc 180

acatgtacaa cttgcacagg atgaagcatc agaagctgac tgcatggact tcggtgctgg 240

gagctgtaag cattggtgtc ggtgtcccgg tcttcgcggt cgtcttccag caaaagaaga 300

cctcctcggg ctgagcttac atgccccctc cctgggccta cttgttggat ctattttgaa 360

tttagcattt tgtgaagcca aagctgtcac ttcaccttac tcttgttgtt tcgtgttact 420

ccatttgctg ttagcagatg atctgaatct taagctcgtt tcttta 466

<210> 925
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g11b1

<400> 925

tcgccgctgt cgacctctga aactgaaagc gccgtcgaga agatctgcga ggtgtgggtg 60

ctggtgagcg gcgcccggga tgagctccag aggcaggagg agactgtcct gtacaagcgt 120

ccacttttt ttttttgag ataagtacaa acgtccacgt gagcatatgt gactgtctaa 180

ggctggttta agaagtcttg tacatttgtt gtatgttttt tttaggatca aacactccat 240

tttattcaaa caccacaagt cgttcaatac at 272

<210> 926
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006g12b1

<400> 926

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atccacgctg gtgtgacacg cttccaaatc gatatgtcaa agtaccctat tttggcaagg 120

cttcaagatg cttacaatga gcatcctgca tttcaagccg cacttcctgc gaaccaacca 180

gatgctcctc catcccagtg aagtaatcag gaccttgatg actgtaagat ttttcatgtt 240

tgatcgagat tctatgatgt aacttcaaag tcagatgttc atgtaagcaa agacccctgg 300

atgagcttga cgatgttgct gtaaaagtga ataaatgcaa tttatc 346

<210> 927

<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h01b1

<400> 927

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tgtctttggt tcaatgaagt tgaccgtttc accgccaggg atcaaattag cttcagcacc 120

gtccgggaca aaataagggc taaagtcggc tggatgcccc agatgttcct ggactgcgaa 180

aggcgcaact ttgttgtcca ggcataccac agggagctgc tagagcagat gattgcgtcc 240

ggcaggaaca cgcctccgat cgcggtcgaa ccatctcgga aaatcagacc aggtagcagc 300

aggagagctc ccccgtcgaa gaagcctgtc gtgaggcgga aaaaggagaa gaaatcgagc 360

tcgcggaggc gggccgcgaa gccggttacc tgggcgatgg atgctgggtg 410

<210> 928
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h02b1

<400> 928

tcgggctatt gtgcggagat cgtggggcgg ctgggctaga tcgctgcgcg gtacgaggcg 60

atggaccggc gggcgccgtg ggaggcacta atgagaaagc cgcacgcggg tagctgagac 120

cacgcagcgt acgcggcggc aagggaagca agactaacgg gcgcagggct cgcggagagc 180

gaagtgcgcc aatggaggcg gtcgttaccg acgcacttaa cggactgtca tcactgcagt 240

ggccaacggc accgagacta ctc 263

<210> 929
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h04b1

<400> 929

tcgaaattta taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaataaaaa ataatttaag agagaaaaaa ataaataaaa gtttgttgtc acgtaaaatt 120

atttttattg aggtgtcttt agtgttgcaa cttattaact ggtttgtcct gtgtttatgc 180

aaaattattt gggtggcgtc ttttattact ttttttattt aatttggttt atataacatt 240

tttaa 245

<210> 930
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006h05b1

<400> 930

tcgagacatc tctgaaggaa tcagagagga tagagaagga gattgctgaa ttgaaagaga 60

tgaagaaaaa gatcagcaca atgacagcag acgagtactt tgcgaagcac cctgaactca 120

agaagaagtt tgatgatgag atccgtaacg attactgggg atactagata acggcgaaag 180

tccaagttct tttactagaa cattcaataa tacttatttg tccctctgga atctcatcat 240

ccatacttgg gtgaattcca taacatgtgg actgggcttg ttgaaattcc aacataactc 300

ttatctttgt gctttctgtt ggacctcatc attttaaggg ttgccagctt atttcaatga 360

aattttgtct cttt 374

<210> 931
<211> 275
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189006h06b1

<400> 931

gagatcttct ccactcctat tctaatcaac ccctcgccgc cgccgccgcc gcagatcgca 60

ccaccgaccg accgaagcga tggccgcctc caccgtcgcg tacagggccg tggccgtcct 120

cgccgtcctg tcggtcgccg ccctctccgt cgtctccgcg caggaggccc cggcgccgag 180

ccccgtgtcg gccgccggcg cagcggcgcc gtccctcgcc gcagcgctcg tcgcctccgg 240

cgccggcttc ctcttcgccg ccgtccgcca ctgaa 275

<210> 932

<211> 460
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006h07b1

<400> 932

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gctctcgcct cccgctccgc agcaccgccg gtagctctcg cctcccgctc cgaggcaccg 120

ccggtagctc tcgcctcacg tcccgcggaa ccgccggtag ctctcgcctc ccgctgatac 180

aatggccaac gccgcggtcg accccgagcg caaaaggtcg cggttgacgt cgtccatgtc 240

gtccatgtcg tccgtggaca ccattctccg tctcccgccc tcgccgctgt tgacgtcccc 300

gacgcgcgcc ccggcgggac acgcgctgga ggagcctccc gcgcggcaca ggccggcgcg 360

gagatccaag cccgtgagga ttttccagag catgttccgg tctctgccgg tcgtgacggt 420

gccgcgctgc ggngggattc tgacgccagc cccgaccggc 460

<210> 933
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h08b1

<400> 933

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cttcatcgcc ttcaagccac cgggctgcga ggagtccggc aaggcctaaa cagctcactc 120

accacgggcc acatataaag tgccattgcg gttttgtcaa ctctgacatt gctttgggtt 180

ttccttctcc atttatcttt cttgtttgtt cctaagaata tgtgtatgtc catgttcatg 240

taccaacatg tctcgagaaa gcatgctcgt atgtgaatgc aatcggtggc tatgtatatg 300

cacatgcaca taatatattt atacaatctg tcgactatgt attcgggtaa ttaataatga 360

gaaacatctt tggc 374

<210> 934
<211> 479
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006h09b1

<400> 934

agcaaagcca gaagcaccac aacctcgtat tctagatttc cagatagaca gggtcagatt 60

aaccagacga tgatgcaggc tgccgttgct tcgtcggccg tgctgcctgt cgccgtaagg 120

ggtaggccgg cggcgaggag gaggagcgcc accgttgccg gtggcagaag gattgtgggt 180

gccggcgtcc gggcatcggc cgcggcggcg ccggaggcgg actacagctc caacgtctcg 240

gtgttcccca tggaggcctg cgacctggtc ggcggcgagg cgtgcgacgc gcagatgtac 300

ccggagacga agctcggcgc cggcaccggc ggccccgctg ccgctgtcgc aagggcgccg 360

gaggtggaga gggagtacct agcctacgac gagccaaaaa cggtgttccc agacgaggcg 420

tgcgacgatc ttgggggcga gttctgcgag gcaccctacc aaaccagcan gtaactaac 479

<210> 935
<211> 342
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189006h10b1

<400> 935

tcgctccctt ctccacggat aaattgcttg atgtgttcaa tggtccggtt gaattggata 60

caagcatgct acaaatcaaa tagttatttg ataaggcatt tgatgagctc ctgtaattct 120

aatctacttc ccacatttta cagctgatgt tatttagtaa tctgtagtga gcctaagaaa 180

tagtactatg gggagaagca ggcaacacgt aatatgtgtg tcatttgaga aaaatgaaac 240

ttccaacttt ccaactgttc attgcatatt acatgtaaaa gacactatct tagacaaata 300

gatgattcac caggttcaat gaaagttagc ttnnntnnnn na 342

<210> 936
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h11b1

<400> 936

tcgcggacgc gtgggcggac gcgtgggcgg acgcgtgggc ggacgcgtgg gcggacgcgt 60

g 61

<210> 937
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189006h12b1

<400> 937

cacccattca ctcgcggcgg cggcggcggt tgttgaccat gtcggcaggg agcgagcgct 60

cgaacgccgc ctacgcgacc ccggcggccg tcctggcgga cttctcgcgc ggatccggcc 120

cgtccgtctc cggcggcgcc gcgggtaccg gcaccggcag cgggaggagc caggcggagg 180

gcggggcgag gaagaagccc cctctccgcc tcgcggcgga cgacaccaag cccgtgctcc 240

gcgacccgat ctcgcggtcc gaccccatgg agaccgagca ggccgtgctg cggctgccgc 300

ccttcccctg acgccttgac gatgacgcac cagcggctct ttgggggggag gaagctgctg 360

gaggttgatc ttgacttgat cgtagccaag atggtggagc tgggg 405

<210> 938
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007a01b1

<400> 938

agaagatgca gcatgtcgat ccatcaatag cagctagcta ttactaacta gcaaaacaaa 60

tttacaaagg tcgatcaatg accaagatgc acggccatta cgtcgccgtc gccgccacca 120

cctgttccac cacaaggagg gcgaggactt ccagcccgcc gctgacggcg gcgtcgacac 180

gtacgggtac tcgaccgaga cggtggtgac cgccaccggc aacgacggcg agtacgagcg 240

gatcaccaag gaggagaagc accacaagca caaggagcac ctcggcgaga tgggcgcagc 300

cgcggccgga gccttcgccc tctacgagaa gcacgaggcg aagaaggacc cggagcacgc 360

gcacaagcac aagatcgagg aggaggggc tgccgccgca gccgtcggcg ccggcggctt 420

cgtcttccac gagcaccacg agaagaagca ggaccactag gaggccaagg aggccagcgg 480

cgagaagaag caccaccact 500

<210> 939
<211> 524
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189007a03b1

<400> 939

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cgcgagcagc ttcaggggga gctgcgacga aaaggtggcg gctgtgcggc cggtgccgtt 120

ctccgaggac gcggtggtct tcgaactgcg cgacggccgg ttggcggagc tgcggcgtgc 180

ggcggagggt cgcggcgggt gggagtgggc gcggatcatc ggcacgcccg ccagcgcctg 240

catgacaagc tactggacgg ccgtcgccac gtagccggcg gcgccggtgg gaaggaagcg 300

ggcggaagcg cggagctgga actctatttc aacggcatac gcgcaagata cgagttgaat 360

gctcaactac tttacctacc tgattagtcg tggctaacgt acaccttgtt ataaaaaaaa 420

cagaggctac ctatgtagta caaagcacaa tagtacgtga tcaagttttc ttgtacatct 480

ctagcggatc ccgtanaccg ggccatccga caaaataact agga 524

<210> 940
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b01b1

<400> 940

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cctccctggg caagaaggcg gcgagcgccg cggtcgccgt ggcggccagc gcgatgctgc 180

tgggcgggtc ggcgatggcg caggacgtgc tcctgggcgc caacggcggc gtgctggtgt 240

tcgagcccaa cgaattcagc gtcaagtccg gcgagaccat caccttcaag aacaacgccg 300

ggttcccgca caacgtggtg ttcgacgagg acgccgtgcc gtccggcgtg gacgtctcca 360

agatctccca ggaggagtac ctcaacgccc caggcgagac cttctcagtc acgctcaccg 420

tccccggcac ctacggcttc tactgcgagc cgcaccgccg ggccggcatg gtcggaaagg 480

tcaccgtcaa ctaagctatc ttctagtagc tccctgtcct gtccttgaga aattgggtc 539

<210> 941
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007b02b1

<400> 941

gcggccacgt gtccgtcggg cacgggcgtg tgggcaagca ccgcaagcat cccggaggcc 60

gcggtaacgc cggaggcatg caccaccacc gcatcctctt cgacaagtac catcccggct 120

acttcggcaa ggtcggtatg cgctacttcc acaagctcag caacaggttc tacacaccga 180

cggtcaacgt cgagaggctc tggtccatgg ttccgtccga caaggcggcg gaggccggcg 240

gcgacaaggc ccccgtggtc gacgtctcgc agttcggcta cttcaaggtg ctcggcaagg 300

ggatgctgcc ggagaagccc atcgtcgtca aggccaagct catctccaag atcgccgaaa 360

agaagatcaa ggccgccggc ggcgcagtcg tgctcgttgc ctagggttct gttcccgacc 420

gtgccccgag atctatatct gaactattag 450

<210> 942
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c02b1

<400> 942

caggtgtatc aagattgccg cttatggcca ctttggccgt gaggatgctg acttcacctg 60

ggaggttgtg aagcccctca agtttgacaa ggcctctgct tgagaggtgg gtatgaagga 120

gtctaatcat tcctgctgct gccgctggtg gttgtatctt ggataattga attccttctc 180

tttagaagga agcagggttt caacatcgcc gtggacacgc tgaattggca tctagtgatt 240

ggtattttgg tatggcatac aaaaatatgt gctgagttaa tactagtcgg gtcttttgat 300

gtcttctgtg ctttcttttt gcttttgag tctactgaaa ccgcagtact tgtgcggttt 360

cctctatcgg tcgtccagct atttttagt actgcatctg taaaaccata tgtgatccta 420

gtaccctgtt cattcc 436

<210> 943
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c03b1

<400> 943

cccactcgtc cgggttctag agtagcaaat acaaaagcca tagccatggc gaaactcatg 60

tgcttatgtt tcatcatcct cactattgcg gtagtcgtgt cggctgacga atgtgagggt 120

gaccgacagg aaatgatcaa gcagtgtgca aagtatcaac aatggccagc aaatccaaag 180

gtaaatccgt cggacgcatg ttgcgccctg tggcaaaagg caaacatgcc atgcctttgc 240

gctggtgtca ccaaggagaa agagaagata tggcgtatgg acacggttgc ctacgttgcc 300

aatttctgca agaagccgtt cccacatggc tacaagtgcg gaagttacac attccctcct 360

ctggcgtagt gactctagtt tacccgcggg aggagaagtg ttggctatta aattccatgt 420

gcctagcctc aaaatacctt tcctttcaga tctgtagtga agctgtgctc agaacagatt 480

atgtctagca ctttgtatga gaacgtttat gaaact 516

<210> 944
<211> 384
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189007d01b1

<400> 944

cccacttgtc ncgttttaaa aaaagaaaaa aaataactag agaaaaatta gaggagataa 60

aatctaaaat acctgaaaaa agggcagggg ttggtttccg agctgaccgt ctgaattgtt 120

cgtctaggca tgatccgtgt cgtatgtttg ggtgattgag aatgcaggct catatgcttc 180

gcttcggggg gtgtgtgtgc cacattttaa tctgtcattt gcgctcctgg gacacgatgt 240

gtgttttggg gacttcccca atatgagaca tgtggcaggt gcaatcgcct gacttgctag 300

gcaaactctg ctcttgccgg gagcgcttcc ctgggcgggc ttttctcttt ttttttaagt 360

gtcgaagttc aaaagggccc cccc 384

<210> 945
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007e01b1

<400> 945

tcggccggtt gtcgtgggct cgcgcatcgg cggcctcctg agccggggcg tcaacgggta 60

cgacatcaac tacgtcgtcg acggcagggg cctgcgcccg gtagcggtcg tccgggacgg 120

cgcgtccggc agggcgatgg agctgtgggc ggaccagccc ggggtgcagt tctacacggc 180

caacgggctc agcggggtga gggggaaggg tggcaaggtc tacggccact acggcgcgct 240

ctgcctggag acgcaggggt tccccgacgc cgtgaaccgc ccgagcttcc cgtcgcagat 300

cgttcggccg gggaaggtgt acaagcatga catggtgttc aagttctcct tctagtaact 360

actagctggt ggtatccaag gtcccgtggt tggtcgtttg tcaggcaaca cagccactct 420

tgtgtttggt gtactggtgt gaattgatcg gctgagcttc aaggggagga ataaaagcat 480

gttgctggtt caaggttttt tc 502

<210> 946
<211> 529
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189007e03b1

<400> 946

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gacggtgcag aaggggtccg acaaaaagaa gctggcgctg aagatcgact acacaaggcc 120

aaacgacagc ctgtcagagg tggagctccg gcagcacggc tcagaggagt ggcagccctt 180

gaccaagaag ggcgacgtgt gggaggtctc gtgctccaag ccgctggttg gcccttcaa 240

cttccgcttc ttgtccaaga atggcatgaa gaacgtcttc gacgaggtct tctccaccga 300

tttcaagatc ggcaaaacct accaaccgga atattgatcc acaccggcac tgcacaccgg 360

ccaagtttca gttgatcaaa atcgtcctaa ttaattaaca cccatgtatg agtcgcgtag 420

gaaatatgtg cctgcatgag tggatagcta gtgaataaat ttaatttttg atgcacatag 480

atatggtagg agaagcaaca acnggatgtg ttgctcttcc atgcatgca 529

<210> 947
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f01b1

<400> 947

tcgcagagtt atagcacatc tcctcgtgag gaattaggag ggaagatggc gtcgccaatc 60

caagctcgtc tgcgcctggg cagcatctcc acgccatggg acggatgatg gccgtcgcca 120

acgccggccg ccgtgccgtc gagctgcatc aggagaagcg acgtctgagc cgccgtcgtg 180

ccaatggtgt ggcggagaga actgcgctcc gcatgcgcgt tggccgaata tgatgccggc 240

ctgcgtggcg gaccgtggtg ctcctacgga gggaggagcg atgctgacgc tatgtggtcg 300

tcgtcgttgt acacagccgt gcctgcggaa gccgtgggtg ccgcctcaac acatccgcat 360

gcagggagaa aaggtatgag gagatgggac aaacggacga tgtacaggat ccaagct 417

<210> 948
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f02b1

<400> 948

tcgcagcttt ttgcgctaaa gactgacgaa gaaagaaagg aatttattgc ttctcttcac 60

aagaggaaaa cagaattgtt tatggcccta attgagaaga agttgcttcc tctccgtcca 120

ggtgttcaaa ggttaattga tgaagctcta ggaaaagggg tgaaagttgc agtatgcagt 180

acttcaaacg agaaagctgt ttcagcaata gtatcgtgct tactggggcc cgaccgagca 240

gaaaagatta ccatatttgc tggggatgtg gttcctcgca aaaaacctga tccggcaatc 300

tacttgctag cagcaactac attggaagtt gatccatcta gctgtgttgt tgttgaagac 360

agtaacatag ggctttcagc ggccaaagct gctggtatga agtgcattgt aacaaaaagc 420

gggtacaccg ccgacgagga cttcgtgata gcggacgccg tgttcgattg catcggcg 478

<210> 949
<211> 100
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007f03b1

<400> 949

tcggcagaat tcaaaatgtg tactcccact attgccaaat gcagtacatg taagaacatt 60

acgatgtatt ttcagacgaa cacggttttg ttccactctc 100

<210> 950
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g01b1

<400> 950

tcgatttgta tatgtttgtg cgggagtaaa ttaaaattac ttgttcattt cctggc 56

<210> 951
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007g02b1

<400> 951

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cgccggccgc cgcgcggtcc ttggcctcat ggccagcgga gtcgtcggga gcgcgttcgc 180

tcaggtggtg cacgccggca ccgtcgcggc catcaaggtt ggcccccgc cgccgctctc 240

cggtggactc cccggaacgg acaactcgga cgaggcaagg gacttcgacc tgcccctgaa 300

gaaccggttc tacctgcagc cgctgccacc ggcggaggcg gcggtgcggg ccaaggagtc 360

ggcccaggac atcctcaacc tcaagccgct catcgacaag aagcaatggc cgtacgtcat 420

gaacgacc 428

<210> 952
<211> 504
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189007g03b1

<400> 952

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cgtccaaggg tcttcttgtg tttgctctcc tgcttgctgc atctatcctc gtcgcctcaa 120

ctgaacaaac tcaggccaag aaggaggaga agaaagccgg cgtagagggc taccctggag 180

gcggcggggg aggctaccca gaccacgctg gaggaggagg aggcggcggc taccctggac 240

acggtggagg aggaggaggc ggcggctacc ctggacacgg tggaggaggt ggcggcggct 300

accctggaca cggtggagga ggaggcggtg ggtacccggg tcacggtgga ggaggcggcg 360

gcggctaccc gggccacggt ggtggcggcg gtggcggcta cccaggcggt ggcggcggcg 420

gctaccccgg acatggcggt ggcggcggcg gtggctaccc cggacaccgc tgangcggag 480

gccgcagtgg atgtcactgg ggct 504

<210> 953
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189007h01b1

<400> 953

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tcagctggta gatgtccagg ggtcgggttc caagtagact gcctgaattg ctcgggtagg 120

catgatccat gaagcaagaa tcgctgattg agaaggcagg ctcatatgct ttgattcgtg 180

agatgtatgt gccacatctt catctgtaat ttgcactcct ggcacatgat gtgtgaaaag 240

gggacaaaac caataagaga catgtaacat gtacaattgc ctgagttgcg aaataatcaa 300

acccccttggc gggaaca 317

<210> 954
<211> 547

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189007h02b1

<400> 954

tcgcccacgc gtccgcccac gcgtccgccc acgcgtccgt acggccggag gagggctacg 60

gctccggata cgggtccaag ccgcaggtgg agcagaccta cggcggatcc gagtatggct 120

ctgggtacgg aaggaagccg caggtggagg agagctatgg gtcggggtac ggaagcaggc 180

cccagggagg gggagaggag tacggtagcg ctgggtatgg cgggaggaag actgaggagg 240

agggctatgg tggttctggg tatggatctg gcaggaaggt gcaaggcgag gatgaaggtg 300

cctatgggtc tggtgggtac cagaagccca agccgtatgg agaggagacc cagggttcat 360

atggtggtgg gtatggccag nggaactatg gccgcatgaa gcaggatgac gactctgatg 420

atgagaagaa gaaccgttac gcgaagcgcg atgactctga tgatgagaag aaggaacgta 480

cgagaagccc accaccattc gcggcacact acgatgacta agcatcagca tggtcttgac 540

ctgtgca 547

<210> 955
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008a10b1

<400> 955

cttttcctcc tttttagacc tcggttcccg gcccggttcg gttaagtagg gtatagaact 60

ggggaacagg aggaagaatg gcggacgaag agtaccgctg attactcggt tagcttgcat 120

gcattagtca gtcatgttga ttgcagaacg gcgctccctt tgacgccgct ggtttttaat 180

ggcggaattt gctatgtttg tgggcaatgc aagctcctga ttgcactgtg tcttatactt 240

gttcagccct aatgatgctc tggaccgagg g 271

<210> 956
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008a12b1

<400> 956

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ccgcctgctc atggcgctgg gctgcaagaa gctgtacaac gccaccaacc cgttcgactg 180

gatggagctc atctccctgc agggcaagac caacttcttc gagaagcgcg tgggcgagta 240

ccagaaggcg tccgtcatgt ccaacctcaa cggcggcgcc gcgacccagc acgtcttcag 300

catcgacgag gacttctgat cagtccgatg ataatatgca atctccatta ccaatggctc 360

gctcgctcgc tcgccccccg cgtttggttg ctccttagta ctagtagtag tagcggtgat 420

acatgtgtgc tgggtgctcc acaatgtttt tatttactgg tatttcgctg gctcttattg 480

gtgatgtact g 491

<210> 957
<211> 514
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189008b11b1

<400> 957

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ttccaggagg tggactactg ctcggaggag gtgagggcgg tgggcaaccc ggcccgccgc 120

ggctgcggcg gcgtgcagga gcacatcgtc agggagacgt tcgtgcagga gttcgacacc 180

gccggccgcc gccacggcca ccacggccgc ggctccggcc acttcgaggt gcgcgagagc 240

aggctcgagg aggacgtcaa cacccgcacc ggcgagttcc acgagcgcaa ggagaacttc 300

gtcgtcaggg ccgatgactg agcttacacg taacggagca cactaccatg tgtgtatatg 360

tcagcagcat atgtatgtgt gatgttgcgc acagtcgtat agcgtatgca tgcgtgcgtg 420

cttggcggnc atcagcccct atcgcgcgcg cgtgcagcgc ttaaataagc gctctaatcg 480

tgaaccagaa taaagcttct cgtgatatta ttnc 514

<210> 958
<211> 372

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008b12b1

<400> 958

cttaaactcc taactgatga cgctatcctg acccagctca aggacggatt tgctgagggg 60

aaggatctgg cgctgacggt catgtcggcc atgggggagg agcagatctg cgcagtcaag 120

gacgtgggcc ccaggtaact tcctcggagc gagggccaag ataaacggag ggatccatta 180

tctgtcaaat ttaagctaaa gaaagacaaa agtattaaag aaggaatgct atcgagtgag 240

acattcacct aagccggagt caagtgcagt gattgctggg tgtagcatat ctgcttacct 300

ctacctatca tccgtgacat ttgggaccct tgtaatattt cctatggttt tatatatgtg 360

cttggtgtca at 372

<210> 959
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008c10b1

<400> 959

gctttcatgg cgtgcgcctt ctccgcctcc accgtgtcca cggccgccgc gctcgtcgcg 60

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tcccgcctcg ccgccgccgg ctcgaggacg gccagggccc gcagcttcgt cgcccgcgcc 180

gcagccgagt acgacctgcc gctggtgggg aacaaggcgc cggacttcgc ggcggaggcc 240

gtgttcgacc aggagttcat ccacgtcaag ctatctgatt acattgggaa gaagtatgtg 300

attcttttct tctaccctct ggacttcacc ttcgtctgcc caactgagat tacggctttc 360

agcgacagac atgaggagtt tgagaagata aacactgaaa ttcttggtgt ttcagttgat 420

agtgtgtttt cccatcttgc atgggtgcag acagagagga aatctggtgg acttgg 476

<210> 960
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d10b1

<400> 960

ttttttataaa caaaaaaaaa aaaaaaaaaa aaaaggaaaa tattataaag aaaaaataaa 60

aaggaacgac ccgaaaaaag ggggccgggt ttcttgcggg gtcaccgaac cttagcgcgc 120

tggcgcttgg gttaccaacc ttttgtcggg gggccccctg acttacaccg cggtcactgg 180

gaacaccctg attcccctaa tttcggggtt tccacactta tctggttggg acccatggcc 240

cttttcccag gggcgcgttc tgaccgccgt tccgtacgcc ccccttttct gaacgtta 298

<210> 961
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d11b1

<400> 961

cggtgagttc cccggcgact acgggtggga caccgcgggg ctgtcggccg accccgagac 60

cttcgccaag aaccgggagc tggaggtgat ccactgccgg tgggccatgc tgggcgcgct 120

cggctgcgtc ttccccgagc tgctcgcccg caacggcgtc aagttcggcg aggccgtgtg 180

gttcaaggcc ggctcccaga tcttcagcga gggcggcctc gactacctcg gcaaccccag 240

cctggtccac gcgcagagca tcctcgccat ctgggcctgc caggtcgtgc tcatgggcgc 300

cgtcgagggg taccgcgtcg ccggcggccc gctcggcgag atcgtcgacc cgctctaccc 360

cggcggcagc ttcgaccccc tgggccttgc cgacgaccct gaggcgttcg cggagctcaa 420

ggtgaaggag atcaagaacg gccgcctcgc catgttcttc atgttc 466

<210> 962
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008d12b1

<400> 962

ccttaactca atgacatact agtagcactc aagacagcag gagttaatct ttattgtggg 60

cctgttgcgc ataaagtatt gggctaccca aaagcagatt cattacatct ggagtacagt 120

tctatggctt gcacagttga gatagttgat gatgtacaat cagcaattga ccatatacat 180

cgctatggaa gtgcacatac agactgtgtg gtcactacag atgataaagt agcagagacc 240

tttctacgtc aagttgatag tgctgccgta ttatacaacg cgagtacaag attctccgat 300

ggtgctcgtt ttggactcgg tgctgaggtt ggcataagta caggccgtat acatgcacgt 360

ggacctgtgg gtgttgaagg tcttttaact acacgatggc tcttacgagg gaaagggcaa 420

gtggtgaatg gtgacaagga tgttgagtac acccataaga gcctttcttt gcaatgag 478

<210> 963
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e10b1

<400> 963

cttttgtttc agaggctgaa ataagaacgg ccgagaaagc tgaaaaggaa gcaagggatc 60

tgaaaggcac aatgaggaag aggatggagt tcctagactt cgattagcgt ccatccatta 120

gtcagtcatg ttgattgata gttggtgctc cctttgtggc cgctggtttt taatggcggc 180

atttgctatg tttgtgggca atggaagctc ctgattgcac tgtgtcttat acttgttcag 240

ccctaatgat gctctggacc gaggggctct tcctcagtag caatgtacca gccctgtatt 300

cttatcttct gttgc 315

<210> 964
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008e12b1

<400> 964

cattgccacg accagcggga gcacgccggc gggaggggggg tggacatgga cctgccggcg 60

acgtatgtca acatgggctc catcgccacc gcgggcgttc tcgactggag gtaccagaag 120

gcgacagggg agaagaggcc ggacaaggtg accggattga tcagcgcgga gcaggccaag 180

gaggccgagc gcagggaggc cgaggagcgc aaggcggagg aggaggaggg cggggccgcc 240

tgggccaaga acaagcacgt gtatcagttc tgatcgatcg ccgccgggcg ccgcgcccgg 300

ccgtgcatct cgcggcagat ggtgttctga acggaaaaag ttcgcgagag atgatggtgt 360

gcatgtatcc accgctcacc gtcacttgga gattcgtgct acgttttctt gttttgtaaa 420

agcttgtctt gttcagagtg ttgcatgatg tttctctttt taaaaatatc 470

<210> 965
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f10b1

<400> 965

gttcaagaag ttctcttccg aggacatatc cgggcagaat caggtcaagg cgtctgtgca 60

gcggaggatc cggcaaagca tcgccgagga gtaccctctc ctcgaaccat tgctggagga 120

catgcttccg aagaagtcgc cgatgattgt tgttaaatgc caaaatcatc tcaatcttgt 180

ggtggtgaac aatgtcccac tcttcttcaa catccgcgat ggtccataca tgccaaccct 240

gcgccttctt catcagtatc ctaacatcat gaagaagttc caagtggaca gaggtgctat 300

caagtttgtt ctctctggtg ccaacataat gtgccctgga ctcacatcgc ctggtggtgt 360

gttggacaat gaagtcgagg aggaaacgcc agtggctata atggctgaag gcaagcaaca 420

cgcattggcg attggattca caaagatgtc agcgaaagac ataagcacca tcaacaaagg 480

aattggagtt gacaacatgc actatttgaa tga 513

<210> 966
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f11b1

<400> 966

tttttcggtt tccaccgacc acccgcgccg ggagagcatg atcgatcagt cagactcgct 60

ggcgcgcgcg ggtgtcctgt tctggatagg ggagggccag ctgaaagaag aatccgcc 118

<210> 967
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189008f12b1

<400> 967

cttacgcgtg ggcggggagg tcccgcgggt tcggcttcgt cacgttcggc agcgaggagt 60

cgatgcgcca ggccatcgag gagatgaacg gcaaggagct cgacgggcgc aacatcaccg 120

tcaacgaggc ccagtcccgc cgctcgggcg gaggggcgg cggcggcggc ggctacagcg 180

gccagcgcgt cggtggcgga ggctacggcg gaggaggacg ctacggtggc cgcggcagct 240

accgatgcga gcggaggcta ctgatgtagt ggcggctacg gcggccagcc cggcggcggc 300

cagcggccac tccggcggtc agtggaggaa ctgagactag aatttcccag ttatcgacta 360

tttacccgtg cgtcgctatc gacgcatggt tcttcagcaa 400

<210> 968
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008g12b1

<400> 968

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccggg gaaggggccg 60

ttcgagaacc tgcagcagca cctggccgac ccatggcaca acaccatcat ccagaccatc 120

tccggccaat aaatccgtcg atttcaccga ccggggaggt ttcaggcggt ctgaattgtt 180

attttggggt gctgaggatg tacaaagtgt ggaggagtag gtggacagtg caaaaatgtg 240

ttgtaatctt aaagctccgg tggtgaaact ttgttcttgt ggattcgccc atggcttcta 300

atggaggctg tacttgtaat atcacccatg cgtgttattt taaacatggc aaaacatact 360

actagtttga agc 373

<210> 969
<211> 520
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008h10b1

<400> 969

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ggccatccgg gagtgggccc gcggggagca cctgtacgag cagatggtgc ggcgcgcgcg 120

cgccgcgacc gagtgcggcg agatcgaggc cgtgttgtgg taccaggggg agagcgatgc 180

agagtccgat gccgaaacgg cggcgtacca ggggaacgtg gagaggctga tagcaaatat 240

cagggcagat cttgggatgc cgcatctacc attcattcag gttgctctcg catctgggaa 300

taaaaggaac attgaaaaag tgagggaggc tcagcttagc attaacttgc tgaatgttgt 360

aactgtggat gcaattggtc tgcccttgaa cgaagataat ctgcatctta ccactgaagc 420

acacgtaaag cttggagaaa gttttgcaca aacctacatc agtaactttt tacaagcaac 480

ccgctatgag acccggaaat gttatgatag ggcttgtcca 520

<210> 970
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189008h11b1

<400> 970

ttttacgggg tttcactcgc attcattctc aacgttagca ggagcgagtg ggagtacggc 60

catggcgccg tatcatccca cgtcagggct cttcgtgggc atcaacaagg gccacgtcgt 120

caccaagcgc gagctgccgt ctcgaccgta cgaccgtaag gggaaaggta caaagagggt 180

gcattttgac aggaacttga tcagggaggg tgctggattt gctccctatg agaagcgtat 240

cactgagctt cttaaggctg ggaaggacaa gcgtgcactc aaggtcggca agagaaagct 300

tggttctcac aagagagcta agcagaagag agaggagatg tcaagtgtcc ttaggaagat 360

gaggtctgct ggtggcggcg ctggtgacaa gaagaaatag aactgggcta gctggtgaat 420

tttatccgga agcaaagacc tgtattacca gtccgtacct atagagctat tgccattgag 480

ttgacactat cttta 495

<210> 971
<211> 133
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189008h12b1

<400> 971

aatgacttga gaggtgtagg ataagtagga gcctttggat tgctaaaact tgtttaagta 60

tatggttagg gagcatttgc gtgattggag atgtgtgttt ttcgatttgt ctatttgtac 120

cgcactgttn gcg 133

<210> 972
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009a02b1

<400> 972

cccacgcgtt ttgtttttg ctggaaccgg gacacggata gctgctacca gcgatttttt 60

tgcttcaacg gagatgagac ccagagagtt tttttgctgg aatgaaattt cttcatgagg 120

tgcggtggcg aggcattttt ttttgtgctg taatttgtgc tttttgctgg aaccatgttt 180

tgattttgct acaacgagca tttgattttg ctggaaccgc ctgaagcaga tttgggacca 240

gttttttttag taactgattt ttgctgcaac catccaaccg gcgagcgggc ccggccggtg 300

agctgctccg gcgagcggcg acggcgagcc ggtgagcggg tccggcgagc cggcgagcag 360

cggccaccga gctgcaatcg tcgctacatg gagctagaac cgcagggtca cgttgctggc 420

gcgaaacgca ggaggcgacg tcggcgaccg gtgacgacga cngcgacggg cggcgagggc 480

agcgacaggg 490

<210> 973
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009a03b1

<400> 973

cccacgcgtc ctcccacgcg tccggagagg ctgacgcctc gttggtcgtg ttgttccact 60

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agggtgcttg ctgttgctgc ctctgccctc ccttattgaa tcatgttgta tctgaacttc 180

agattcagaa gcctgtaata attgtcatgt tgtaatgctg ttgctgcctc 230

<210> 974
<211> 623
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009a04b1

<400> 974

gttttaaaaa taataaaaaa aaaaaaaaaa aaaaaaaata aaaaaaaata taaaaaaaat 60

aattaaaaaa atatatatta tattttatat atatatagaa tttatttttt ttttttgtta 120

aaatttttt tctttttgta tttttttgtt gtaattttat tttttgttt gtgttttttt 180

attttttttt gctttttgg tgtttttatt tatgtttgtt ttttttttt tcgtgttgtt 240

attctatttt tttgttttgt gttgtatatt ttttagtttt ttttttttt ctatttttgt 300

gttttttctt tttatgtttt ttttttttt tatttttttt gtgtctcttt atttttttct 360

tttttttat tttttatttt tttttttcc cttttttttg tgatttttt ttttcttgtt 420

tttcttttt ttcgtttttt tttttttttt tgttattttt atttttcttt gtgtgttttt 480

ttgttttttg tgttattttt atgtttgttt tttgtatttt ttgattgtgt tattatgttt 540

tattctattt aatttttatg tttgtttctc tggttgtttt ttttctcttt ttttatatga 600

ttttatcttt tgagttttat ttt 623

<210> 975
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009b01b1

<400> 975

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acctgcacct ggggcatacc ctgctgcacc tggggcgtac cctcctgcac ctggagcggg 180

aggccctgac ggggagaagg ggctcctcta caacatcatg catggtgttg ccagcgctca 240

tggaggtggt catggctacc catctggggg ccacgggtac cccccgcagc agcatggata 300

ccctcagcaa ggctaccctc ctcagcatgg ctacccaccg cagcagcatg gctaccctac 360

acagcagcat ggctaccccc ctgctggcta ccctggctca tctggtcaca gtggtagcca 420

tggaagagga ggcatgggca tgggtggcat gctggc 456

<210> 976
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009b02b1

<400> 976

gggtttgcaa ggaaggatcg atagagctga gacgaggtga attgagcaat gtggctttgg 60

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gcgtgtgttt tctgaagttt gcaagttgta acgaaagttg cagcaataaa aatgggtttt 180

cgt 183

<210> 977
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009b03b1

<400> 977

gtggggttcg gcagcagcgt ggcggccgtg gcgccggcgt cgtcgacggc ggggaggacg 60

agccttcgcc cgcagcggac gcggctggcg gtgccggcgg cgacgagggg cacgccggct 120

ccggccaaga aggagaagag catcctggac ttcatcgtca gcgccatcgt caaggacgag 180

caggagttca tcgagaccaa cccgctgctc aacaaggtgg acggcccggc gccctccgcc 240

ggcggcaccg cctccaggaa ggccggcggc accaccgccg gcaagaagcc cgcggccgac 300

agcgagggcg gcggcgggtt caacctcggc ggcctcttcg ccaagaaagg ctaggctgaa 360

ccagcccgcc taatacgtag gcgcgcgctt gggtgcgtgc ttcgatctca tagctcgatt 420

tattgctgta actccatgaa aaacatcgca gagatctgca tatatgtacg tacacgcggt 480

gtgactactc aaacgattc 499

<210> 978
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009b04b1

<400> 978

ctcccgtccc gtccccagcc aacctcccat ccccgtctcg cgtcgcagcg gcagttccac 60

tccctcgcca tgggcaagat taagatcgga atcaacggtt tcggaaggat cgggaggctc 120

gtcgccaggg tcgccctcca gagcgacgat gtcgagctcg tcgccgtcaa cgaccccttt 180

atcaccaccg agtacatgac ctacatgttc aagtacgaca ccgttcacgg ccactggaag 240

cacagtgaca tcaagctcaa ggacgacaag acgctgctct ttggcgagaa gccagttacc 300

gtcttcggcg tcaggaaccc tgaggagatc ccgtggggtg aggctggtgc cgattacgtt 360

gtggagtcca ccggtgtctt cactgacaag gacaaggccg ctgctcactt gaagggtggt 420

gccaagaagg tggtcatctc tgccccaagc aaagatgccc ctatgtttgt ggttggtgtc 480

aatga 485

<210> 979
<211> 332
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009b06b1

<400> 979

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ggtctctagt aatatatagt tggatcaccg ttgtttagtc gatggatatg tcgatgcagc 120

ggtgacaaat aaagtgtcac acaacgtcgt gtgtgacccg cccaaactag ttgtttaaat 180

tctgaaataa aatacaaata aagttgtatc aagacaatgt tcatattgnc aaaaaaaaaa 240

aaaaataaaa aataaaatta aaataaagat taaaattaaa aaaaatttaa aatttatgat 300

tctctcatat aaaacccatt catcctaatt ac 332

<210> 980
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c02b1

<400> 980

ccttcgcgtc tttaaaaaaa aaaaaaaaaa aaaaaaaaaa agaaaaaaat aaaaaaaaaa 60

ataatgctaa taaaataatc ataaaaaaaa taaagaacga acaaatgaaa aaaaaatggt 120

cctttctagc cattgtatta tattaaaaaa agggggggggc gctttttaaa ggaccaaggt 180

ttccttccct gggttggcga actattgttt ttttattggg gcccctaaat ttaattacct 240

ggggctggtt ttacaaacgg ctgaactgga aaaaccttgg gattacccaa ataaataggt 300

tgggaaagaa tccccttttc acaacg 326

<210> 981
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c03b1

<400> 981

ggttcccgag cccgcagctg cggccgagcc ggaggccgag gcgccagccg tggtcgagac 60

agagaccaag gaggccgtgg ctgaggcaga gccggcggtg gtcgaggagg tgaaggagga 120

ggcggcgcct gctgccgagc cggaggttgc ggccgtcgcc gaggaagcac cggctgctgc 180

ggaggaggca ccc 193

<210> 982
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c04b1

<400> 982

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gggtccacta ttgctcaggg catggctttt ggtactggca gtgctatggc gcacagggct 180

gttgatgctg tgatgggtcc ccgtaccatt cagcatgaga ctgttgtcgg tgaggctgct 240

gcatctatga ctccaatgga caacgctgct gatgacaagt gtggcaaccc ttccaaggcc 300

ttccaagatt gcatcaacca ctacggcagc gacatcagca agtgccagtt ctacctcgac 360

atgctgaacg agtgccggcg tggaggagca ggagctggtg caactcttta agctactat 419

<210> 983
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c05b1

<400> 983

ccttaaaccg acacaggtga atatgtaaga atgaaagatt tacctaatta act 53

<210> 984
<211> 283
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009c06b1

<400> 984

ccatatgctg ctgcaccgca acgatgcggc gtgccaggcc aaggggttct acaactacgg 60

cgcctttgta gccgccgcca actcgttctc gggcttcgcg accacgggtg gcgccgacgt 120

caggaagcgc gaggtggccg cgttcctcgc tcagacctcc cacgagacca ccggcgggtg 180

gccaacggcg cccgacggcc cctactcgtg gggctactgc ttcaaccagg agcgcggcgc 240

cgcctccgac tactgctcgc cgaactcaca gtggccgtgc gcg 283

<210> 985
<211> 293
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d03b1

<400> 985

gtgcagcgcc tcatagtgta cccccaccac caccaacgct acactcacaa gctaacctca 60

ccatttcagg aagcatatga gcagcgaaag cttgggcaag aactccaaga tcatgggtgg 120

ccgtgaaaga aaagaagtta atagcaccgc aaagcatttt gttgatttca cagaagcaga 180

ggaagatctt gttttcagaa tgcacaggct tgtcgggaac aggtgggaac ttatagctgg 240

aagaatcccc ggaagaacag cagaagaagt agagatgttc tgggcaaaaa ggc 293

<210> 986
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d05b1

<400> 986

agtttatcaa cggcgacccg ttcatcggca gcctggagac gcccgtcacc tccagccccc 60

tcgtcgcgtg gtacctctcc aacctccccg cgtaccgcac cgccgtcagc ccgctcctcc 120

gcggcatcga ggtcggcctc gcccacggct atctcctcgt cggccccttc gcgctcaccg 180

gcccgctccg caacacgcca attcacggcc aggcgggaac cctcggcgcc atcggcctcg 240

tctccatcct cagcgtctgc ctcaccatgt ac 272

<210> 987
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009d06b1

<400> 987

atatataaaa ctaacaaaaa aaaaaaaaaa aaaaaggaaa aattgttaaa aaattcttgt 60

tgtcttatcc gcattagaca aaatgaagta aaaaataatt caaaatttaa gtatctttca 120

gtatctaagt ctaaatacta ataaaaagaa gaaagaagga ttgatttgca gcaatagatg 180

tctttcacat acaactagaa aaaagtaatt tccttttttga atggcagttc caaaaaaacg 240

tacttcaatg tc 252

<210> 988
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009e02b1

<400> 988

gttctacaga gaaaatgaga aaatgagctg tgtgcgtcct gattacatgt ccagtcaaga 60

agacataaat gaaaaaatga gaagcagtgg gtcgactccg gtaacactga tgaagaactg 120

ataaaaagag aggagaaaag gataagagaa ttctttgagt tccttgatga tgctgaattt 180

ttggagaata tgcgctgcaa acgtcttaat tatccacgga aacatgaaat acatctccag 240

tcggatgaag aaattgcccc tgattcagat gaagagtgaa gatgtccctg cctattatca 300

cctgttttca tttatcagta gattgaactc agtggagctt tcgagtattt gaacttgtta 360

ccaagttaaa cactcgactt aatcttagct attatgacgt ttgtgtgtaa tgtcatatgt 420

gaacaaggct ggaaggcttc tccaatttct tttgtgttgc tt 462

<210> 989
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009e03b1

<400> 989

gtgttagttg acagctagag aactttgcgc tgtctcttta tctagctaga gaactttcta 60

ctgtctcttt atcactgcat gatgggttca actatcctcc tgttcctggt taattagctg 120

catattattg taactattaa tcggtgcaca cgagttatcc tacttgcttg cttggttagt 180

ttcaaaaaaa ccaacccgat gctcaacaag gaggacagac cggcgccctt cgccggcgag 240

accgactcca agaaaagccg gcggcaccac ccccggcaag aaacccacat acaacagggc 300

ggccgtttta aagaaccaaa ctt 323

<210> 990
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009e05b1

<400> 990

cttattttgg tctctcgcga ctcttcggtc aagaacaaac acggatgaac acacaaaatg 60

tggtggggtc atatggatat atagctcctg aatatctata cagaggtgaa atctccacaa 120

agtcggacat atacagttta ggtgtactaa tccttgagac caccacaaga gaggagaatt 180

gccgcgggag cgaaccatct gcaggacaat ttattaaaaa ggtacgtgaa aactggacag 240

aggagaacat cgtatcagag tacccatcat taaaagcaga ttgcctccga caagtaaaaa 300

aatgcatcga aattggactg caatgtgttg agactgatcg gcagaagaga cctaccatag 360

aggcaattat cgaccagctc aatggacgac atactaattg agctacaagg tcatactgat 420

ctccagtctt catggagaat aaaatttggg tcttcttcag gagacatgtg caagagggaa 480

ttgacatctt actta 495

<210> 991
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009f01b1

<400> 991

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ttcgaatggt atcactccaa tccttgctgc atatatgaac aaagatacag ttcatccgag 120

gttcttgctt acagttgatg atggtcttgc aggcatccgt tctccattac ttctgcacct 180

ggagatgatt acctgagcgt gcatatccgc acgctaggtg actggacatc tgaactcaag 240

aacttgttcg ggaagtgttt cgaggcacaa gttacttcca agaaggccac cctttcgaga 300

cttgaaacta cagttgtggc agactctgcg acagaagaca ccaggtttcc taaggtcttc 360

atcgatggcc cttatggtgc accggcgcaa aattacaaga aatacgacat tcttt 415

<210> 992
<211> 322
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009f02b1

<400> 992

cctacgcgtc cggcctggtc cggcaagacg gagaacgagg agaaggccag ggcggcgttc 60

ctggtgaggt gcaaggccaa ctccgaggcc accctcggca cctacaaggg cgacgccacc 120

ctcgctgagg gcgcctccga gagcctccac gtcaaggact acaagtactg attgatctgc 180

cttcggtgct gtggcccgtt tgggcgtccc gcttaccagt atcattgtca ttgtttggtt 240

tcctgagtcc tgatatatcc tcggatatcg aacatcgttt ttaataatat ggaacttgtg 300

ttttcatann nnaaaaannn aa 322

<210> 993
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009f03b1

<400> 993

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aacgacgacg gcgcggacga tccgtcgtgc tcgaactcgt ccttggccga cgaggggggtc 120

ggcgtggccg cccggaggaa ccacggctgc gggaacggga ggctcatcaa catctgcttc 180

ggcgcgcagg ggctcacggt ggaagactct gccagcgggc agcagacgag caagatgttc 240

aagcagcagt gcctccgggt gtcctgacct ggcctgcgtt cggctttgcg gttcagcgat 300

atatgtgtgt gtgtgttgaa ctccccggc ttggtttggt ttggtttggt ttggcgtgct 360

gctccgcgta caagagcaaa tgtttggtga tttgctgaga taaattccgt gtatgtatca 420

tagt 424

<210> 994
<211> 469
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009f04b1

<400> 994

cacacccgcg caacaagatg ccaatggaga ggtcggtgtc gctggccgag aggagcaccg 60

ccgccgccgc cgcgccggcc aacgacctcc gctgccacag cgcctcctac gccgtctcct 120

acgcgcccac caaggtgcag cgcgccagga gcaccacctc cctgtcgcgc cccgcggcgg 180

cgaccgccgt gcagcggagc ggcagcacga ggaccgtctc cggcgccggc cccggcccca 240

ccccggggct gaacctccgg tgctacagcg cctcctacgc cgcctcctac aagcctttct 300

ccgacggcgc cgcccaggcc aaggggccca acgccgncac caccaccgna gccacctggt 360

cctccgccgg ccgccgctcc ctcaacctga ggagctacac cccgtccttc tccgcattgg 420

tcgacaacga ggccccggcc ccggccccgg ccaagacgga tgacgcgga 469

<210> 995
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009f06b1

<400> 995

cccacgcgtc cggcttccct gaggtttgat ggtgctctga atgttgatgt caatgaattc 60

cagaccaact tggtgcccta cccgaggatc cacttcatgc tttcctccta tgccccagtg 120

atctcagctg agaaggccta ccatgagcag ctgtctgttg ctgagatcac caacagcgcc 180

tttgagcctt catctatgat ggccaagtgt gacccccgcc acggcaagta catggcctgc 240

tgtctcatgt accgtggtga tgttgttccc aaggatgtca acgctgctgt ggccaccatc 300

aagaccaagc gcactatcca gtttgttgac tggtgcccca ctggcttcaa gtgtggtatc 360

aactaccagc caccaggtgt tgtcccaggc ggtgaccttg ccaaggtcca gagggctgtg 420

tgcatgatct tcaactccac cagtgtcgtc gaggtct 457

<210> 996
<211> 376
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189009g03b1

<400> 996

cccacgcgtc cgcccacgcg tccgggaagc agaagctcca gcttcaggtt cagcttgttc 60

tccatagcaa tggctggcac tggcagcacc tggctcctgc tggagcagaa gggagctggg 120

ccgggagcaa ggagctccca cgccatcacc ctcgtcggcg gcacggccta ctccttcggc 180

ggagagttca ccccgcgcct tcccgtggac aacaccatgt acgccttcga cctcaaggcg 240

cagtcctggt ccgccctcac gcggccggcg aggtgccccc gccacgcgtc ggcgtcacca 300

tggcctccgt cggcgccacn ggtgtcgtgt tcgccggccg cgacaaggac cacacggagc 360

tcaacgagct cttact 376

<210> 997
<211> 419

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009g04b1

<400> 997

tgcttccgcc cacgcgtccg tctcctcctg tcgcctccag agcaacagtc ctcctctcct 60

cctgtcgcct ccagagcaac agcagctcca gctcgagcaa gaaacaagtg tagtactagt 120

ttgatctgtg aacatgttgg ccatcttcca gaagcaggtg gcgcacgcgc cgcaggagct 180

caacagcccg cgcggcagca ccgccaagcc caagaacccc gacgagatcc tccgcgactt 240

ccacgccgcc cacccctccg acgccttctc cacctccttc ggcggcggcg ccgccctcgc 300

ctgcgtcgcc gcgcagcccc gcaacctcgc cgncgncggc taccagagga tgttctgcgg 360

gcttggacga catctactgc gtcttcatgg gcacgctgga caacctgagc gcgcttatg 419

<210> 998
<211> 379
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189009g05b1

<400> 998

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ctcaaggagc agagagaccg ccgcagcgag agcatggcca agaggaggtc gaagctgtct 120

gctgccacca aggctcctgc tgcctctgcc taagatgttt acagtcttcc gttattagct 180

gtaatagtgg aagaatttct cgcactttgt tggatgatat gaatctagct gctactttca 240

gcgttgttga gttgtaattg atgcttgttt gcgtgaacat gggtacctta atcgtcagga 300

agttgttact gaatgaacaa aattgcatga acttggatta ttgatgcaag ttttgtgtga 360

aaanaaaaan nnntaannt 379

<210> 999
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189009h03b1

<400> 999

tttacgccca cgcgtccggc tgattaagat agtactaaat tgaaacaatg tggatgaaga 60

ccgtgttctg ggggctccta gtattcatgc tcgtggcgac aacaatggcg gtcgagtatg 120

gtgcaaggag ccataacagt ggtccttgga gttggtgcga tccggcgacg ggctacaagg 180

tgagcgcact cacgggctgc cgggcaatgg tgaagctcca gtgtgtgggc agtcaggtgc 240

ccgaggctgt cctaagagat tgctgccagc agctcgccga catcaacaac gagtggtgca 300

ggtgcgggga cctcagcagc atgttgcgca atgtgtatta cgaaactcgc gtgcgtgagg 360

gaaaggagtg ctcccaggtt gccgaaggag gtgatgaa 398

<210> 1000
<211> 52
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009h04b1

<400> 1000

cccacgcgtc cgcccacgcg tccgcccacg cgtccgtagt tctagatcgc ga 52

<210> 1001
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189009h06b1

<400> 1001

gcctacccac ataaaatctc cgtcgatcca ccacaccctg caatggcgtc cgcgctcacc 60

aacgtgagcc tgtctacctt cgcgcccacg gccaggggcg acgtcctcgc gaggccgcag 120

gtggccgccg cccgcgtcac cttcccgacg gcgcaccgcg gcagcggcgc cctctcctgc 180

agggcgggcg ggccggccac gccgccgggc atctccgaca agatgtcgga cagcatcaag 240

gaggcccagg agacgtgctc ggaggacgcc gccagcgggg agtgcgcggc ggcgtggga 299

<210> 1002
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117a01b1

<400> 1002

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gcggcgctcc tcctggtgct gctgctggcg gccacggggg agatgggagg cccggtggcg 120

gtggctgagg cgcggacgtg cgaggcgaag agccacaggt tcaggggccc ctgcgtgcgc 180

caccgcaact gcgccaacgt ctgcaagacc gagggcttcc ccggcggcaa gtgccgcggc 240

ttccgccacc gctgcttctg caccacccac tgccgccagt gaccaaccta ttgcctctac 300

ttcgtccgta cgtccgccta gctgcagcct gcctgcgtgc atgctggctt gctcgcacct 360

ctgtgcgtgt attgtagtac tgtgtccatg aataaacctc ggcctgtctg tcatggcatg 420

ctgcgattgg tttaagaaac gcaggtcctc ttttacttt 459

<210> 1003
<211> 399
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117a02b1

<400> 1003

tttttatgaa accgcacntt tgntcctcat tncngaggcn cctccatcng catctccatt 60

tccatctcca tgggtgggtt cacccaacaa tccgactaac gacaacatcg gcagcgacgg 120

cagggtcatg tcgcggtatg agcgccatgt tcaggccaac aacgctcgct gtcctttctt 180

ggtgggggcc taatcccatc cacgacggtg ctcttgctct tgtggtctga gaagctgacg 240

aggagcttcg ccattgctat cccatctagt accaaccatg tatctatctt atctatctat 300

atttctaggt gatcctgtgg acatatatat gtgggattga tccgcctacc ctgatgctat 360

tgttgcgcac cgatgaagca atgtcattgt gagactgat 399

<210> 1004
<211> 524
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117a03b1

<400> 1004

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cgacatgggt ctcaaggagg agtttgagga gcacgcggag aaggccaaga cgctgcccga 120

caccaccacc aacgagagca agctctgcct ctacggcctc tacaagcagg ccactgtcgg 180

ccccgtcaac accgcccgcc ctggcggcct ctttgatatg gccggcaagg ccaaatggga 240

tgcttggaag gccgtcgaag ccaaattcaa ggaggaggcc atggctgact acatcaccaa 300

ggtgaagcag ctgctggagg aggctgccgc cgcatctgct tgatcccagg ccacaaaacc 360

gcaatcgcta ttgttatcct ggtggtgcag ccatatgtgc cagcaaacac aaataagttt 420

caagtactag ttgttgtcaa gcttatcgcc gtcgtgggtg taattacgtt gaacaagccc 480

tgtgatacat gaaagtgcaa tctcagttta caccatgatt gatt 524

<210> 1005
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117a04b1

<400> 1005

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cggggccccc ctccattctc atgctcagcg tcaagaacaa cactcaggtg cttatcaact 180

gcaggaacaa caagaagttg cttggtcgcg tgagggcatt tgatcgtcat tgcaacatgg 240

ttcttgagaa cgtcagggag atgtggactg aggttccaaa gactggtaaa ggcaagaaga 300

aggctctccc ggtgaacaag gacaggttca taagcaagat gttcctccgt ggggattcgg 360

tcatcatcgt cctcaggaac ccgaaatgag gttgacgact cggcgtaaac cagaagagtc 420

tgttttcgct atgcctgctg tagtttgtat gccgaatgct ctggatcagg gagtgtgtta 480

gagacag 487

<210> 1006
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117a05b1

<400> 1006

tgttgtgttg tatggggacg cttatttacc tgtgaccaca tgtatgttaa ccactttgat 60

ct 62

<210> 1007
<211> 408
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117a07b1

<400> 1007

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ccgggcgcat cgtgatggag ctgtacaagg acgcggtgcc gcggacggtg gagaacttcc 120

gcgcgctctg caccggcgag aagggcgtcg gcaagagcgg caagccactg cactacaagg 180

gcagctcgtt ccaccgcgtg atccccgact tcatgtgcca gggcggcgac ttcaccaagg 240

gcaacggcac cggcggcgag tccatctacg gcgagaagtt cgccgacgag aagttcgtcc 300

acaagcacac caagcccggg atcctctcca tggccaacgc gggccccaac accaacggnt 360

cccagttctt catcttgacc gtcccctgca attggctcga cggcaagc 408

<210> 1008
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117a11b1

<400> 1008

ggctgctctt aaagggtgca tgctatgcaa taacatgatt tcgctgcttt gtttttgtga 60

ttc 63

<210> 1009
<211> 432
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117b01b1

<400> 1009

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gtggaggatt tctaccagaa gcaggggaag gttctcgagt tcgatttacc tggaggaatc 120

cctgaatctt ggccaaagct gctcgatgtt ctgaatctcg aggaccagca ggagatgaag 180

ttggccgcgg cgtaagtcct gcccgtggga cataccttac atagtccaaa gcataccata 240

cattttttca ataatggaaa agggataaaa aactcttgtt tccatagata tgtgtgcctt 300

tgtgagcgta attttttgac cactagcgag ctgtttattc ccgccggcgt tttcgcgagc 360

cggtgctatg taacgatcat aacgatattt tgatcttgac ttttttgagt gagcggtttg 420

tggtgcgtnn aa 432

<210> 1010
<211> 209
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117b02b1

<400> 1010

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gattagcctc ctctcctgtc accttccctt ctccagtgta gagtatccat ccatccactt 120

gtgttgttcc tccgcgcant ttcgtcgtcc atgtactttg aactttgatt aattaattaa 180

tcaatcaatt gattggtggg gaagttttc 209

<210> 1011
<211> 238
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117b03b1

<400> 1011

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tagtcgccct ggtcgttcta tcccctaccc gagtgtgatg catcgttatg ttcggttgtt 120

tttgagaatt gctgctgttg tgaacagctt tggtgaactt gataaataag tgagccctga 180

attgtgtcaa ctaaaaaaac aaggtaaaaa aagcccataa acaacaagaa aggcaaaa 238

<210> 1012
<211> 221
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b04b1

<400> 1012

catgtataat ttgccattgg ggtcttttca actctgacac ggctttggga cttccttctc 60

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ggctcgagaa agcatgctcg tatgagaatg ctatcggtgg ctatgtatat gaacggacgc 180

ataatattat acaatatgtc gactatatac gttctaatgg t 221

<210> 1013
<211> 185
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b05b1

<400> 1013

aataacaaaa acggggaaaa aaaaaaaaaa aaaggaaccc caaaaaaaaa agaacacaaa 60

aaaaaaaaaa aaacaaaaaa aaaaaaaggg ggggcctttt taaagaacca aggttttcgc 120

ccgggggggg gcaaaaataa ggttcttttt ttggcccccc aaattttaat tcatgggggg 180

gggtt 185

<210> 1014
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b06b1

<400> 1014

tggggttctc tttagggatg cttcttttat atcaataaaa ccgcgggtgc tagtgcccat 60

ggagtttcat ttttgaggac gtgggcatag cccagtagtt gggggcgcat gattgtaaac 120

ctaacgacca gagttcgatc cacgtcgggg acgaatttct ggaattctca tgagggatgc 180

ttcttctata tcaataaaac cgtgggtgct agtgcccatg gagtttcatt ttttttt 237

<210> 1015
<211> 510
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b07b1

<400> 1015

ctgcgcctgc gccttagcct tcggagcgaa tcgagccgac gtcgcccccc acccacccgg 60

ccgcgcccac cttcggagca ggacgcgatg gcagacgacc tttgggagaa caccaatcat 120

ctgcccaggg agctcccgtg aagtccaagt ttgccgaatc caagctccca aagttcaagt 180

tcttgcctga gcacaggtct ccaaaacccc aggtgaacag gctgatcagc aagtacatcg 240

actacctcaa cacgatccag gccaagaggg aggacacttt caacacccta caggaccaga 300

acatgagcaa ggagtcgctg gcgaacgcga gcaagacgat gaacaagaag ctgcacgcca 360

tggtcaagtc ggcgaaagaa gactcgagcg aaatcgtgaa gctgggcggc aatgcgccgg 420

cggtcccttg ccggttcgat accgatgtca aggttcctcc ccgtggatag gtagtctgca 480

tgcaagtcct ctcacagaca gacagacagt 510

<210> 1016
<211> 503
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117b08b1

<400> 1016

tcaaggaaat gttttggctt ggaaatcttt tgcttaaaga tcctctggag cgggagccaa 60

tgcgccgtaa aggtttgtac caatcaatta agattgccaa tgggttcagc aacattcatt 120

tgggtctagc atgtcatggt ttcgaggagt atgtattgag gactcgcctt tatcgtctgt 180

ttgtggaagg tcttgaccgt gcctttcttg agatttggaa gcgggtcaat gagggtcaga 240

cgtctttcac agatgctctg caggaagctt acaatgagaa tccggttcca ttgcgccaac 300

atactttgaa ggctgagctg gagtgccccg gcggtttttt gcaactggag cgacaattcc 360

gccggtgcac ataaggcatt agtaaggaac ttccagatcg aagagtccaa gagttgattg 420

cacaggaaat taattacaag cgtgcgttgc caaagacgta tgcacagttc gccaggaaga 480

agctcangtt gcagaagtct tgg 503

<210> 1017
<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b11b1

<400> 1017

tgagttacta aaagataaaa tgaagttgcc tgcgcgtgtt atttcagtag tgtgtctatg 60

tctgtacctt gcacacacac tgtgtgtgca tatatattta tgcgacatgt atgcacgcgt 120

ccgtatgcgt gagtgaactg tcaactcctt gctgtactcc agtcctagcc gatgtgtacg 180

tctgatgtgc ctgacctact tgttcaggca attaatgaat agtaattgtt ttcct 235

<210> 1018
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c01b1

<400> 1018

aaatgaaaaa aaaaaacaca taaaaaaaaa aaaaaggaaa aaaaaaaaaa gagaaacaaa 60

aaaaaaaaaa aaccggaaaa aaaaaaaaaa aaaggggccc accaagggaa aagcaaaagc 120

aacaaagaaa aacgggggac aaaaaacaaa acaaaaaaag gaaagaaaaa aaaaaaaaaa 180

caaccgaaaa cgggggggcgg gcggc 205

<210> 1019
<211> 453
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117c02b1

<400> 1019

gccgctggac cgacccgaat gcccgggcga cccacgcgcc gggtgcgagg gcnacggagt 60

ggcgcagccg ggggaggcgg cggggnacgg gggcacgaca ggggcgggcc cggaccagag 120

cggcgggaag acgaagaaga aggggatggg gatggcgggc gggctggcgg tgggcgcggc 180

ggcgggcgtg ctgggcgggc tggcgctggc gggcggggcg agctacgtgg agcacaagat 240

cgaggaccac gtgacggagc gcgtggagga ggacatgtac cgcggcggcg gcggtgggta 300

cgacgactac ggcggcgacg acgactacta gaccaaccat gggtccgtcg ttccggtggc 360

catgcacgaa agaatctttc tttatgtttt ctgcgcgcgg aagatgccga gggtgagggt 420

gaaccaccgg accggagagg tgagaagaag aga 453

<210> 1020
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c03b1

<400> 1020

accgacccaa tgccgggcac ccacgcgccc gcatcccccc ccccccataa aaaaaaaaga 60

aaaaaaaaaa agggaccgaa aaaaaaaaac caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaacc gggggggccg ccaaaaggcc aaagcaaccg acgcgggagg caacgaaaaa 180

cccccaaaag ggcaccaaaa aaaaacaacg ggccgcggga aaaaacgcgg gacgggaaaa 240

acccgggggg aaccaaaaca aaaagccgag aaaaaaaacc cccattggcc agagggggaa 300

aaaggaaaaa ggcc 314

<210> 1021
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c04b1

<400> 1021

aaagtcagct gatgccaaga agggcgatgc caaggcccag gctgccaagg ttgccaaggc 60

tgtgaagtcc gggtcaatca agaagaccgc aaagaagatc cgcacgtctg tgacatttca 120

ccgccccaag accctgttca aggccaggga ccccaagtac cccaggatca gcacccctgg 180

caggaacaag ttagaccagt accagatact caagttcccg cttaccactg agtctgcgat 240

gaagaagatt gaagacaaca acacccttgt cttcatcgtc gacctgaagg cagacataaa 300

aaagatcaag gctgtcgtga aaaagatgta cgacatccat gccaagaagg ttaacaccct 360

g 361

<210> 1022
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c05b1

<400> 1022

gggggggacca ctgttgatcg gggacctttg gcggcgcacc ctgcagcagc tgcccctcgt 60

cgcgccgcac gtggagttgc ttcgcccgcg tcgtacgcgc gagcaggagc accaggagcc 120

gccccggacg cacttcgacg ggcacctctc cgtcgcggtt gtctccgtcg cgccgcgcgt 180

ggaggtgctc cgtcggcccg cataggccgc gcaagcagga gcaccttgcc aggggccgcc 240

cgggccgtgc atcgatgggc agctcgtcgt cgtggctgcc ccgtcgcgtc gtgcgtggac 300

ggcgatccgt gtcgtcacac gagaaggagc accaggcgcc gtcccagccg cacacattga 360

cgggcacctc gccgtcgcgg ctgttctcgt cgcgccgtgc gtggaggtca cccgttggcc 420

cgcatcagtc gcgcattcag gagcaccagg ggtc 454

<210> 1023
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c06b1

<400> 1023

actagcttca gtttgtcagc ctctgccact ccgggcattt tcttgcatcc acgacggcaa 60

tggccaccgc tgatgtccag aacccgacgg ccgcgctgac ggaggaggcg cccacggtgg 120

agacgcccgt cgccgccgag gaggtcgcga agacggagga ggcccccgcg cctgtcgagg 180

ccgaggtcaa ggcgcctgct gcccccgtcg aggtcgagga gaccaaggag gtggcacctg 240

ccgccgctga gacggaggag gccaaggagc ccgtgccagc atgctgcggt cgagccggag 300

gccgatgccc ccaaagagac agaggcgcca gccgtggtcg agacagatac caaggaggcc 360

gtgtgctcct acgtggcacg gcgtgatgct gagtcagcca gtggagtgga gtggaatgat 420

acttcttact aggtgtggag tggga 445

<210> 1024
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117c07b1

<400> 1024

tcaacgagac gccacaggcg aaccaggagt acgagtcggg caaagcgatt ccgaacaatc 60

agattattgg aaagcttgag agggcacttg gagctaagct gcgtagcaag aagtaatgcc 120

ttgaagtagc ccaaaagctc ttgtaggctg ttgctggtgg ttgatactga ataactatgc 180

cacagaacga ctatatgtat catcatatac tcgtgctcta aaatgtgttt gtcatatgtc 240

ccagagtaag agctgcattg aacatgcaga ctgacatgat aacctgcgtg gtttatgcgc 300

ggtgtttggc actggctttt gcttatacaa ggctctattg tgagcttctc tacaaacctt 360

cctcttcttc ccccctttct t 381

<210> 1025
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117c08b1

<400> 1025

agagcactat ttccaagaag gccacgtctg acgctgacga agaaggttct gacgttgagg 60

atgatggcga ggaggacgag gagtaaatag tagatgaggg aacagcagtg gtgcaaatca 120

gcgtttgctg cttagggttt agcttgccat gtcgatgtcc tcattatgta atgttatgta 180

aggagaatgt ttagatgcgt actcctgggc tgtggcatgc tagagatgtc tctgtttgac 240

tattagcgaa gaaaagctta aaacccttga ctgcttttct ttcttggact tccacagcat 300

gtggaaacag tcattatgtt ggcttgctta caaaataaac ctaac 345

<210> 1026
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c09b1

<400> 1026

ccccccagcc aggctgaccc ggcacagctt aacacctagc agagctgcgt agctgttcct 60

cgggaggtgc acttgcttcg acgccggcga gctccgcatg ccgcaggtga tgtctctcaa 120

gagcataaga tggcagagcg gggcgtcctc ctgttcctcc tcgaacacgc tcagcatccg 180

ctgcagcagc acgggggccg gcgccgtcac gcgcatcgga agacggctag ctccgcctgg 240

gcggcgcggt catcacagcc acc 263

<210> 1027
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117c11b1

<400> 1027

ggttttcacg gtggagcagt tctgcgacga ctccggcgaa gacccggcat gcagcaggtc 60

cctccctctc tctccccgca ccaccatccc ccctgaattg taccactacg tgcctcatgg 120

tacccgctct tggttaacat tgttcgccgc cttctcaggt ctgtgagcgg caacagcatt 180

caagaccaca taacctacct gggcgtgagc atgcacgctg aggcctggag cagctgcagg 240

atcgtcatgg actacgccga gctgcggtac aagatggacc tccatggaaa cgtcgtcttg 300

tcgaagcagc accagcagcc cggtctgtcg gacgagcgaa gaagacacag cgcccagtga 360

aaccaatgta aacaagttct gtatcatcat agtagcacca cgcacgcaac ttgtcattcc 420

cctctctgct tcattggttc tgcatccaga gaggggataa cacaaccacg ctcgacagga 480

aaatgc 486

<210> 1028
<211> 113
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsfl189117c12b1

<400> 1028

aaataagcac aganccggag attcccaaat aggtcaacct tttaaactgc ctgctgaatc 60

catgagcagg catgagacaa cctggcgaac tgaaacatct tagtagccag agg 113

<210> 1029
<211> 184
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117d01b1

<400> 1029

ggcctacaac cgcgcacccc tacgacaccc gcacggaaca aagaaagcag gggaaccggt 60

aaaccccccgn cccacggnnc ccanacnngn caaggcaacg aaggcccccg ccgccgcggc 120

gctccaccac cacgacgccg ccgcccaaca gcacgcccgc ggcgccgagg ccggggccgg 180

ggag 184

<210> 1030
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d04b1

<400> 1030

gtgccctctc ccttttccg ccggggcttc tccttcgccg tcgtctgcag cggtggttag 60

aagaccaagg ccgataagcc cctcggactc tgaggcggtt tgacagtcga cattgacgcc 120

aacggtagga aggtcggcaa gaagggcgtg taccagtttg ttgcagtacg gtgccaacgt 180

cgacggctac agtccaattt acactccaga ggaatggtct gagtctggtg accgctactc 240

cggcggaacg accgggcttt ttatctgggc cgttaccctt gccggccttc ttggcggagg 300

gggtccttct tggttacaac accagcgctt tttccggctt agagagcatt t 351

<210> 1031
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d05b1

<400> 1031

aggggggccc tatttccccc gcccggccag accggagcac gcgcagagca ttctagtcat 60

tctgggcctg ccaggtggtg ctcatgggcg ccgtggaggg ctaccgcgtc gccggcggtc 120

cgctcggcga gatcgtggac ccgctctacc ccggcggcag cttcgacccc ctgggccttg 180

ccgtggaccc cgaggcgttc gcggagctca aggtgaagga gatcaagaac ggtcgcctcg 240

ccacgttctc catgttcggc tttttcgtgc aggccatttt caccggtaag gggcccctgg 300

agaacctttt cgttcacctc gtcgacccca gtaacaacaa cgactgggcc tttttcacca 360

actttttttc ctggcaagtg agctgcggtc agttaaacct ctaggccgac aacttca 417

<210> 1032
<211> 165
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d06b1

<400> 1032

gacgcgccct gttagcggtg caatttagac cgggggggttg gggggtttcc cccagcgtga 60

cccctcctat tgccaagtcc ctagagcccg acactttagg ttttttcctt tccttttttgg 120

caagttcgcc gggtttcccc gtaaagtttt aaattggggg cttcc 165

<210> 1033
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d07b1

<400> 1033

acgcactctt tgatggaaag ctgtatggcc tgtgcgggtc tggtcacctt ttcatctttg 60

aaattagaca aggatctttt cattgcatcc atggagtgcg taattcactc tctgggtgac 120

cttgggtgga acacctcaat ccttgcctag agaggggcg cgcatggtaa gggactatct 180

agtcgaatgt ggcggcagac tgttgatggt gatacggtgg ttttgctcta ctgcccgtcc 240

aacaagtgat gactgtttag agcatgaccg tcctgtcgca cttggggtct ttgaggccga 300

cctgcatgcc gtacccgttg gatggagaac agtcagtgat ttggatggcc atg 353

<210> 1034
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d11b1

<400> 1034

ccgaaactgc cagtggaggc cgactgccca aaggcgtgcg gtccgaagct catgcacgac 60

atgtgcatgg acacgcttcc gcgggggatt cgatcctagt ccgtccgttc acattgaggt 120

caccgagtat gcgcttctcg tcgtgcaccg cgccctcgag ttctacggtg ccacggttgt 180

cgccgtggtc gagctgatcc gcagcaggtc gcttctgtgg cgactagagg gctgtctaca 240

acacaatgct tgacggtata ctcctacgct gtgcagtgca tggagcacgg taccggcgac 300

atggta 306

<210> 1035
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117d12b1

<400> 1035

accgggcaaa ccctggcgac accaaactta attcgtttgg gtgaccatac tcctattgac 60

tggcggcggt ttaacaacga ggggcctggg gaaaccc 97

<210> 1036
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e01b1

<400> 1036

gcccgcttta tcatccaaat tattcctgaa atatgcataa tttcccaaaa agggaggtac 60

acgatatatc atgtactcat agtttcatgt gaaggcagct tcatgctgta tgaactgcac 120

tagccttcca agttaaggta tgagatggca gtataacaca tggttatttt gctacccggg 180

atgcatgttt gatgataaaa taagagggcc gcttgtgtgg ccaatcgtct 230

<210> 1037
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e02b1

<400> 1037

cggtcgcgtg gggtcggtgc gtgtgtgtgc gcgcgcgcat tttgctcgtt catagacatg 60

gcttccaacg ggagcgccgg cgaggtcagg gatgtccaca gcagcgagac caccaagacc 120

ctcctcaaga gcaacgacct ctacgattac atgttgaaga cgatggtgta cccgcgggag 180

aacgagttca tgcgcgagct ccgacagatc accaacgagc acatcttcgg gttcatgtcg 240

tcgccgccgg acgaggggct ggtgctgtcg ctgctgctca agctgatggg cgccaagagg 300

accatcgagg tcggggtcta caccggctgc tccgtcctcg ctaccgcgct cgccatcccg 360

gacgacggca ggatcgtcgc catcgacgtc agcagggagt acttcgacct cggcctcccc 420

gtcatcaaga aggccggcgt cgcgcacaag gtcgac 456

<210> 1038
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e03b1

<400> 1038

cttttctaaa ccctcctgcc gccgtcgccg ccggcgccgg tttcgtccgc caccgaacag 60

cagccatgcc gcccaagcta gacccgtcgc aggtggtgga ggtctacgtc cgggtgaccg 120

gaggcgaggt cggcgcggct tcgtcgctcg cccccaagat cgggcccctc ggcctctccc 180

ccaagaagat cggtgaggac atcgccaagg agacggccaa ggactggaag ggcctccgcg 240

tcaccgtcaa gctcaccgtc cagaaccgtc aggccaaggt ctccgtcgtc ccttcggccg 300

cggcgctcgt catcaagtcc ctcaaggagc ccgagaggga caggaagaag gtgaagaaca 360

tcaagcacaa cggcaacatc agcctcgatg acgtcatcga gatcgccaag atcatgaagc 420

ccaggtccat ggccaaggag atgggccgga ctgtcaagga gatcctcggc acctgcgtca 480

gcgtcggctg caccgtcgac gggaa 505

<210> 1039
<211> 471
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117e04b1

<400> 1039

gagatgcatg ttcaagtgcg cttcctgctg ctacatatat gactgctagt acatgtatat 60

ttacaagggc atatctgatt atttgctggt tgaggaactt caaatggaag tatgtaaaac 120

tacaattatg ttcttattcc taatgcatta gaacagatct gattgcttta tcaatgagtg 180

cataaattgt catttcctaa gattgctcaa acatacgagt tcttttgcag ggacaaaagg 240

aggaaagtag caagttcaca agttgatcta agatgttccg gtgactgctt ttggtcataa 300

catggttgtc acattttgtt catatggaag ttgatctcag cttgnggata gaagacttgg 360

tctcttccat aatttcttct ggtggtgatc gaacatttag tctcttagga cttggccatc 420

atattttatt agaggacatg actcgaatgt gacttatgta tttcctaatg c 471

<210> 1040
<211> 569
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e05b1

<400> 1040

ccggcgctgt ttatggcggc gaagcagccg ttggcggacg tggaggacgg gctcctcgcc 60

cacctcaacg cgaacgccga gatccccgac tcccgctact tcgcctcctc cctcggcgtc 120

ccgcacaagg acgtggagga tgtcatcaag aggctctccg ccttccgcat cgttgagagt 180

gcggacatca ccaaggagac gtggatgctc accgatgagg ccaaggggta tgccgcgagg 240

ggctcccccg aggtgcagct cgtcgcggcc atcccgcccg agggtgcctc caagggcgcg 300

ctcaaggaga gattgggggа cgcgttcgat attggaatga aggcagcagc caagaacaag 360

tggattggat tcgagaaggg aaacaaagac ctcgtactga gaaaggttga ggataccaag 420

gatgaattgc aagagcagct taaaagactg gagaactggg aggttttcgc tgacaaagta 480

tagatgattt gaagagaaga aagcttgtac aaaagagaat ctatttgttt cactgagaag 540

gggctgattt gtgcaagaga aaacattgc 569

<210> 1041
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e06b1

<400> 1041

acgttttgga ggccaaggcc tttgtgagct cttgcggcca cgacgggccc ttcggcgcca 60

ccggggtcaa gcggctccag gacatcggca tgatccaggc ggtgcccggg atgaaggcgc 120

tcgacatgaa cacggccgag gatgccatcg tgcgcctcac ccgggaggtg gtccccggca 180

tgattgtcac cggcatggag gtcgccgaga tcgacggcgc cccgagaatg ggcccgacct 240

tcggcgccat gatgatctcc ggccagaagg cggcgcacct ggcgctcaag gccctcggcc 300

ggtcgaacgg tatcgacggg acgctcaaga acgtgacccc ggcgctgcac ccggagatga 360

tcctggcggc gaccaacaac ggcgacatcg tggacgcc 398

<210> 1042
<211> 291
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e07b1

<400> 1042

tggaggggag tggaatgatg ctttttttta ggtgcggagt gggagtgcta tgcgcggggt 60

cgcgtgacgt gggctaaata aaagtgttgt cgggtcgggt cgacgcccag tgtctgtcag 120

cagcgagcga cgcagtgcca ctctcgccgg cctgcgtctg cgtctgctta gctggagcct 180

tgctacggtg tgtgtcacag tgtcagttcc acctatgatc gatcggtatc ctaaccggtt 240

tgcgttatcc ccgactacat taacacaatc caagccaaaa aggaagacac g 291

<210> 1043
<211> 382
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e08b1

<400> 1043

attggaaaag attttgctcg gggtatcttt ttcactcagg actgggtatc catgccaggt 60

gttataccgg tagcttcagg tggtattcat gtttggcata tgccagctct gaccgaaatc 120

tttggggacg attctgtatt acaatttggt ggaggaactt taggacatcc ttggggaaat 180

gcacctggtg cagcagctaa tcgagtggct ttagaagcct gtgtacaagc tcgtaacgaa 240

gggcgcgatc ttgctcgcga aggtaatgaa attatccgag cagcttgcaa atggagtcct 300

gaactagccg cagcttgtga agtatggaag gcgatcaaat tcgagttcga gccggtagat 360

actattgata agtggataaa ac 382

<210> 1044
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e10b1

<400> 1044

gaaggggga tcttgaggag gcaatcgtta acagaccaac catgggcgtg accaaggagg 60

acgtggaggc cgccgtcgcc gctcgcgctc agccctaccc acctcgtggt caccgataca 120

tccggcgggt gcggcgcgag ctacgagatc gaggtggtgt cggacaagtt cgaggggaag 180

cggctgctgg agcgccaccg gatggtcaac accgcgctgg cgccgctcat ggccgagatc 240

cacgccgtct ccatcaaggc gctcaccccc gcgcatgccc agcccaagtc ggagccggcc 300

gccgccgaca aggcgcaggc ctgactcgct ctttaggatt cactagtact gaattcacac 360

atgcgccgct ggatgtcggg agctcgcatc atacagtact ctctgcttga atgaataatg 420

tagcaactag caagatgcgt ctgcggaatc gagac 455

<210> 1045
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117e11b1

<400> 1045

acgaggtaac attctggacc ggtgctgtga tgtccccccg gctccagaat tcgcaagctt 60

gcctggtttt atttatttat cccagtagtg ttagtatcat gtaaaccaaa tcgccagtct 120

gaaggtgata aaattactgt attacctatc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacccaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaag gggcgccctt ttgggggtcc cctttt 276

<210> 1046
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f01b1

<400> 1046

ttctctacgc gtccgccatt ctacacaccc acacgcgcac tcgttagaca ttttccttca 60

ccaccgccgg agggagggag ctccagccat ggccgccaag tgctacccga cggtcagcga 120

cgagtacctc gcggccgtcg ccaaggccag gcgcaagctc cgcggcctca tcgccgagaa 180

gaactgcgcg cccctcatgc tccgcctcgc gtggcactcg gccgggacct tcgacgtggc 240

caccaagacc ggcggccccc tcggcaccat gaagtgcccc gcggagctcg cgcacggcgc 300

caacgccggc ctcgacatcg ccgtcaggct gctcgagccc atcaaggagc agttccccat 360

cctctcctac gccgacttct accagctcgc tggagtcgtc gccgtcgagg tcaccggcgg 420

gcctgaggtt ccc 433

<210> 1047
<211> 130
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117f02b1

<400> 1047

cagggactgg accggaatgc ccgggttttc cacgcgcccg cctttgcttc cgcccacgcg 60

accggtccgg gggagagcac tttcaccccc angcaccgga aggacagcca gaaggggaac 120

gcgaaaagac 130

<210> 1048
<211> 458
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117f03b1

<400> 1048

acattttggg ctttnagaga gagatgttga agaaggaagg tttaaggagg agagccggat 60

gggcatcgcg gacgtggtgt cggagtactg ctcgctgccg cggggtcggc ggcacatgaa 120

gaagcggaag cagttccaga cggtggagat gaaggtccgc atcgactgcg agggctgcga 180

gcgcaaggtc aagaaggccc ttgacgacat gaaaggcgtg agctcggtgg aggtgacgcc 240

gaagcagaac aaggtgacgg tgacggggta cgtggatccg gccaaggtga tgcgccgggt 300

ggcgtacaag accggcaagc gggtggagcc gtggccctac gtgccgtacg acgtggtggc 360

gcacccctac gccccggggg cctacgacaa gcgcgcgcct cgccgctacg ttcgcaacgt 420

catgagcgac cccctcgccg tgccgttcgc cagggcct 458

<210> 1049
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f04b1

<400> 1049

agggccgcat tttataacag ggattctcta tgatcactgg tgcggccaag gctgttggca 60

aggctcttcc tgagctgaat ggcaagctta ccggtatgtc tttccgggtt cccactgtgg 120

atgtgtcagt tgttgatctc actgttagaa ccgagaaggg tggatcatac gatgacatca 180

agaaggctat caaggctgca tctgagggaa aactcaaggg gatcatgggt tatgtcgagg 240

aagatttggt ctccactgac tttgtcggtg acagcaggtc gagcatcttt gatgccaagg 300

ctggaattgc tctgaacgac cattttgtca agctcgtctc gtggtacgac aacgagtggg 360

gttacagcaa ccgcgttgtc gatctgatcc gccacatggc caagactcag tagagcgttc 420

tgatt 425

<210> 1050
<211> 131
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f05b1

<400> 1050

ctgggggggc ttttgtatcg tgagagtgtt tatgaccatt cgcggggaga ccggccctca 60

atcagattca ggaatcatgg aaaaaaaaaa acataaagaa accaaactta cgaaccgtag 120

cataacaaaa a 131

<210> 1051
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f06b1

<400> 1051

ccggaagcag ctgtagactt atgtctacaa catgaagaac accgtcggcg acaaggacaa 60

gctggcggac aagctggaga gcgaggagaa ggagaaggtg gaggaggccc tcaaggaggc 120

gctcgagtgg ctggacgaga accagacggc cgagaaggag gactacgagg agaagctcaa 180

ggaggtggag gccgtgtgca accccatcgt gtcggccgtg taccagaggt ccggcggcgc 240

gcccgggggc gagggcgccg acggcggcgt cgacgacgag gaccatgacg agctgtagat 300

ggttttaagg gaaccaattt ttgtaatggg gttagtaggg tgagagagga gacatggata 360

attggaaccg ctgttgctta ctttgggtct gcggtt 396

<210> 1052
<211> 188
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f07b1

<400> 1052

gggggccagg tccaccagcg gagccggctg ccaaagcagt aacagctgcg gcgaacgaca 60

gatggttccc aacggggctg ccgccgccgg cacgatcgcc aagaggatgc tcaccgactg 120

ccacatcgag agcgtgcgca gggttactga ccgcccgggg agaccggcgg atcagactgt 180

acatcctg 188

<210> 1053
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f08b1

<400> 1053

cagtgaggga ggtgttggcg gcgtccgacg gcccaccgcc cgcgggcatg gggtcatccg 60

acagcgactc cagcggggtg ctgaacgaca cggacgcgac cggtgccacg ccaacagagg 120

aggcgccagc tccggagatg gggacgctgc tcggcgggcc cggggcggcc ggcgcggcgg 180

cggcggggca cgggcagatg ttcctgcacg ggaatttcct gaaggtggag gaggacgaga 240

cggggttcct ggacgacgag gagccgtgcg gtggcttctt cgccgacgag ccgccgctgg 300

cgtggtggac cgagccgacg gatccctgga aatgaggcgc ggcagagaga gagactcggt 360

gggagacgac acctcgcgcg gggaataaaa gattagtgaa agaagcaggg gcttttctga 420

aattttggaa atctcgtttt atctagtcct ttctgtaaac cc 462

<210> 1054
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f09b1

<400> 1054

ccagaggagt tcgggaagat gaaggcgaag gcgccggaca acttccgggt cgactacgcc 60

atcagcaggg aggagaccaa cgcggctggg gagaagatgt acatccagac caggatggca 120

gagtacaagg atgagctgtg ggagctcctg aagaaggaca acacctatgt gtacatgtgt 180

gggctgaagg gcatggagaa gggtattgat gagatcatgg tgccattggc tgcaaaagaa 240

gggatcgact ggatagagta caggaagcaa ctgaagaagt ccgagcaatg gaacgtcgaa 300

gtctactgat tcttgtcttt ctcactctcg acacttcctt gtgcatatgt gccgacgcac 360

ccccgattcg tgcgatcgaa gaagattgat gtacgtacat aaaagtagat aaagggtgta 420

ttatttccga tattttgtca ggttggttta tttaaagctc acatat 466

<210> 1055
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f10b1

<400> 1055

aggggctcct ttagcagggg gactgcgtta tccactacac gtgggtgccc cgcctggagt 60

tcagcaaggt tggtttcgtc ttccgtgagc acaatagctc ccccggatac tatgacggtc 120

gatactggac aatgtggaag ctgcctatgt tcgggtgcac cgacgccaca caggtgctca 180

acgaggtgga ggaggtcaag aaggagtacc ctgacgccta tgtccgcgtg atcagattcg 240

acaacctgcg ccaggtgcag tgcgtcagct tcatcgcctt caggccaccg ggttgcgagg 300

agtctggcaa ggcctaaact accagttgaa acaatggcct atgtatgaag gtcttttgtg 360

aacgtcactt atgtccacga ctctgctgga cgaccagagc atatt 405

<210> 1056
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f11b1

<400> 1056

ctcgggacga ttttatcaag ggaccggttt tgaaagatgc ccaattctac agcaatatga 60

tgtctaagat gaccaatcct tcaacagaag aaagcaaagc ttgaactgga gcagtaccca 120

aaggaaggat aggtgtcccg gcgtgcgctc atggcagggc cagattgcct gctcagctct 180

atgggctggt tagatcacac atgtgcttgg agttgctaaa aactagagaa atttcagttt 240

tgaggttgcc aggcgatatt ttttcttgtc aagaacaatg catgtttaga cctttgcata 300

ttatagtgtg tgctttccgg gaaatagatg gtcct 335

<210> 1057
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117f12b1

<400> 1057

gaaatccagc ggctcggcca gcagcagccc gacggctcct acaaggtcaa gtttggtgtc 60

atcttcaatg acgacagatg cgcaaacata tttgaagcat tagttggcac cttacgggcc 120

gccaagaaga ggaaagttgt cacctacgat ggtgaaatgc ttctgcaggg tgtttcatga 180

caatgtggag ataaccctct ttccttcctc cacggttgct gtcacttgaa gtttgcaaca 240

ccggccagtc tttcacatta ttt 263

<210> 1058
<211> 496
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117g01b1

<400> 1058

ctattcctag caagctatat acctacatag nacagccatg gtccccaccg tgatggcctc 60

gtcggccacc tccgtcgctc ctttccaggg gctcaagtcc accgccggcc tccccgtcag 120

ccgccgctcc aacggcgcta gcctcggcag cgtcagcaac ggtggaagga tcaggtgcat 180

gcaggtgtgg cccatcgagg gcattaagaa gttcgagacc ctgtcctacc tgccaccgct 240

cagcacggag gccctcctca agcaggtcga ctacctgatc cgctccaagt gggtgccttg 300

cctcgagttc agcaaggttg ggtttatctt ccgtgagcac aacgcatccc ctgggtacta 360

cgatggccgg tactggacaa tgtggaagct gcctatgttc gggtgcaccg acgccacgca 420

ggtgatcaac gaggtggagg aggtcaagaa ggagtaccct gacgcgtatg tccgcatcat 480

cggattcgac aacatg 496

<210> 1059
<211> 357
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117g03b1

<400> 1059

agatgccggn caagaggcnc gncgagatcg ggcgcgnggc cctggtgaac tacggcaagg 60

actacggccg cctcgtcgtc atcgtcgacg tcgtcgacca gaaccgggca cttgtggatg 120

ctcctgatat ggtcaggtgc cagatgaact tcaagcgtct ttcgctgacc gacatcaaga 180

ttgacatcaa gcgtatccct aagaaggcaa ctttgatcaa ggccatggag gaagcagatg 240

tgaaaaccaa atgggagaac agctcatggg gttagaagct tgttgtccag aagagaagag 300

catcgctgaa tgactttgac aggtttaagg tcatgttggc taagattaag aggggtg 357

<210> 1060
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117g05b1

<400> 1060

ggcctgtctc agctggggtg ccttctattg gcgatccctt cgtcagccgc ccgtcaaacc 60

acgagcagaa cacggtagcg ccggcggcta aaccgggctt cttggccaaa ttctgtccat 120

gcctcgccgg ggggggagcc accagcctga ccgacaagcc cagccaccgt gggccgtgcg 180

cgtgaccacc ggaggatttg 200

<210> 1061
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117g06b1

<400> 1061

ctggggcaag tgtgtggatc agtggccttc aggagatcat gaccgggtac tcggactcgg 60

gcaaggacgc cggccggctg tcggcggcgt ggtatctcta caaggcccag gaggagatcg 120

tggacgtggc ggagcagcac ggcgtgaagc tcaccatctt ccacggccgg ggcggcaccg 180

tggggcgcgg tggcgggccg agccacctcg ccatcctgtc gcagccgccc aacaccgtca 240

acggctcgct ccgggtgacc gtccagggcg aggtgatcga gatggtcttc gccaagggcg 300

accccggcat cgccgcgctc tacgacaagc ttctcgttcc ccaagacctc tggcccttcg 360

gcgagcagct cagagccaac tacgccgaga cacagagcct tctccttgaa gttgctgggc 420

acgaagacct gctggagagc gacccgtacc tg 452

<210> 1062
<211> 305
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf1189117g08b1

<400> 1062

catggccgat ccagccgagg agacncgcgc cgcgcccccg ccgaccccgg cagtgcccgc 60

cgagggcgcc ccgccgctat cggcggagcc gccggctagc accgacgcct cgccggagaa 120

ggcggccccg cctgcgcctg cgccggacac gacggtcagg tcccgggggt tcaggctgct 180

cggcgaggac accttcgtgc acaaggtgct cggtggcggt aaaactgctg atgtactgtt 240

atggaaggac aagaaaacaa ctgctgttgt gatcggtggc acaactgtaa tatgggttct 300

atttg 305

<210> 1063
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117g09b1

<400> 1063

aaccctgccc ggccgatcgg cgccatggac ccgtgcccgt tcgtgcgggt gctggtcggc 60

aacctcgccc tcagaatgcc ggtggccccg cccgccgccg gcgccggcgc cggcgtccac 120

cccttcacct cgccctgcta catcaagatc cgcctcggca agatggcctg ccagaccgcc 180

gccgccccgt tcgtgctctc cgacgccgcc gccgagcagc ccccgtccgg cgccctcgcc 240

gtggtctttc acctttcaa ggccgatctg gagtggttcg cccgcaagcc ctcgctcttc 300

ttcccctccc gcggggccgc cacgctcaag gtgttcgttt acgccggccg caaggggact 360

acatgtggcg tcagctccgg gcggctgctc gggaaggcca ccatctcgct ggatctcaa 419

<210> 1064
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117g10b1

<400> 1064

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accggcggca aggcgccccg caagcagctc gccaccaagg cggcgaggaa gtctgcgccg 120

acgaccggcg gagtgaagaa gccccaccgc tacaggcccg ggaccgtggc gctccgggag 180

atccgcaagt accagaagag cacggagctg ctgatccgca agctgccttt ccagcgcctg 240

gtccgcgaga tcgcgcagga cttcaagacg gacctcaggt tccagagcca cgccgtgctg 300

gccctccagg aggcggccga ggcgtacctg gtggggctgt tcgaggacac caacctgtgc 360

gccatccacg ccaagcgcgt caccatcatg cccaaggaca ttca 404

<210> 1065
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117g11b1

<400> 1065

atctttccgg gttcacagat ttggaggatg tcttgcaact gtggatccgg ttgcagctgc 60

ggctcagact gcaagtgcgg gaagatgtac cctgatctga cggagcaggg cagcgccgtc 120

gcccaggtcg ccgccgtggt cgtcctcggc gtggcgcctg agaacaaggc ggggcagttc 180

gaggtggccg ccgggcagtc cggcgagggc tgcagctgcg gcgacaactg caagtgcaac 240

ccctgcaact gttaagct 258

<210> 1066
<211> 258
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117h01b1

<400> 1066

agaacganac gtttgagcgg gattgcctcc aggcaagggg ctgcgaacgg aggtgaagaa 60

gacatggtaa tgctccttct gctgccgctg gcatgtgttc ttgtgtgtgc acagtgtatt 120

ccaagtagct actaccaagt tccaatctgg ttggttgtgt aataagcacc cgtggcccgg 180

ccctaggcag gcaggcgtac gtacgtgcat gtgtgcgttg tggaggcatg gtaatggtac 240

agtgagtctc gtttcagt 258

<210> 1067
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117h02b1

<400> 1067

agaaagtttc gcaagagaga gcaatgaaaa ccaagggact cttctgttat ataccccttg 60

ttgcaggatg gcaagttgta ggatgtacgt gtaaacctga ttgtactctc ctgtctaaac 120

tacatccata atggtcttat tgcatattcc ctctgctcct tctatattcc tgtgtaagga 180

aatgtattcc tgagatgatt tgttatgtaa acctgatgtg atgcgatgga tgatttgaat 240

ttcatatgta gttttcttga ttttaatatg aaataatgtt ggatgt 286

<210> 1068
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117h04b1

<400> 1068

gccagtagtg atccctcctg ttgttgatgc tgttccatcc aggacttcca agaagaaaga 60

gggatcagca tcaggttcag gatcaggttc agtgtccaag gatgtcgcta gacggtgggc 120

aagaagggct cagaagcgag aggctgctta caaggcggct gcagagaagc acctcaagct 180

ccttgcagag gctgggccgt gggaaaactc ccgaagcggc acctgaagca ccggaattac 240

ttgtggttgg gcctccagag tcactcgagg ttggtcctac tgcgatcgag tgatc 295

<210> 1069
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117h05b1

<400> 1069

cccggccgtt tttgcggcgg ggaaactcaa gtactcgggg cgggccgcgg caacggccta 60

gggccagggc catcagccct tcccaaccac gcctgcggat gccaagtcca agtcctcggc 120

cgcggcaggg gccttgggcc acggccacaa ctccttcccg gtcacgccgg cggccggcaa 180

gtccaaggtc tcggcgcatg ccgtggcacc gggccaggcg ttcttcttca accaacccca 240

cgccgtcggc ggcgctgacg catccgcatc gagccttaag cgcaagcgcg gcgtctttca 300

gaaggacctg cagcacatga tgtatgggtt tggggacgat ccaaatccac tttcaaaaac 360

agttgcactt gtagaggaca ttgttgtgga atatgttact ga 402

<210> 1070
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117h06b1

<400> 1070

ggacaaccgg naccggatca cggtgatggc ggagaccatg gaccagtcgg ccctgatcct 60

gagcatgccg aggcgccggc ctcgggacga gacgcatgag accctgcgga cgtcgcagtt 120

acccagcgcg catgtcaagg acaagtgggc caagaacctc tacctcgccg ggatctgcta 180

ctggcgaacg gtggcctagg ggtagcatag ccatagccat ggctgccggc ggagcgagct 240

ggatgcaatg catccttgct aataactagt aggttctatt tatccagacc tgatttttgt 300

tgttgacacc aacccaaccc ccaccccatg ccatacatgt gtatttttt atggagccga 360

gcattggtgg tcagcagcag gaggatctgc ttgcttaact ttaaatttag gtttaattac 420

tgccgcattg actgtagcgc ggtgt 445

<210> 1071
<211> 221
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189117h08b1

<400> 1071

ccctttttag ctgggaagcc tcttgttata ataacctaac taacaagnnn tatgatctcg 60

cattgcatat tgcttgatca acacatgcca tgacctggct attgtatttg ttatattaca 120

atggatagtc ttggcttgct tttggactaa agcctttcgg actatgtata gcttgatttt 180

ggactgaaaa aaaaaaaaaa aaaagatgaa gagaccataa t 221

<210> 1072
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117h09b1

<400> 1072

gaggggggccg ctgtctcagg ggtcggctca ttttgcttcg ccgtgcacga gcaccacgag 60

aagaagcagg accacaagga ggccaaggag gccagcggcg agaagaagca ccaccacttc 120

ggctagatcg tcgttgacgt gcggtggccg gcctcgccgc cggccgtgcg tgtgcttacg 180

ttacgtgtgt tccataaagt gagagaggct gggacgcggg cccggtctcg tgctcgcccg 240

tgcgtgattt tctctgcgtg ctaagctttc gcgtgcctga ataagtgggg ttgctgctca 300

tgcagtggct cccacacctc atgcgtcggt gtgtgtcgtg tgtcggtgtg tgttttaatt 360

ttaccggggc cctgtttttg taatttcact ttattttgca agtcctcacg aaacctttgt 420

ggggccattc atctcaaatt ttggtcttat taaaaaaaaa aaaaggggggg g 471

<210> 1073
<211> 91
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117h10b1

<400> 1073

aaaacaaaac ccgaaaaaaa caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 91

<210> 1074
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189117h12b1

<400> 1074

tataaaaatt gtttgttggg ggcatgcttc aggacgaacg ctggttgcat cttttt 56

<210> 1075
<211> 208
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189118a02b1

<400> 1075

atcgcgagcg gccgccctgg gtcctgtcat tgtcctgcta taacggatag cgctccctgt 60

tggcgccgcc gtcggcgggg atgccctagt ggtggagggt gtatgtcctc ttccgcgggg 120

tgcccctgct tgtacctaga tggttactct ttccgtccat tgtcaccggc taacattgtg 180

ataatatcag tctgggtaat gttagatt 208

<210> 1076
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189118a03b1

<400> 1076

ccttactctg ccgcgagggg ctcgttagag agtaagaaag aagctcgccg gagtccgaga 60

aggggaggga gagggaggat gctaaactgg gggccggtgg cgatcacggt gccactggcc 120

gagctgctcg cgcccgggcc tccggtgaga ctccccggtt agcacgagtg gggacaggtc 180

gtcaaccaga acaccatggc cacgcccttc ctgagtcaac accatccact acttggatga 240

cacagggctc tgcgatatcg tcatcgtggt gcacatcacc accgactata aaccggttga 300

gctccatcaa cttcgtccgc cagcttcaat caaagtgctg tagcacttat acctttttct 360

ttttt 365

<210> 1077
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118b01b1

<400> 1077

cgcgtccgac gagctctggg acggtcgtga agtcatgatc ggctacgccg catcgatctt 60

gggagaggcc atcaccggca agggcatcct gtcccagctg aaccttgaga ccggcatccc 120

gatctacgag gcggagcccc tcctcctctt cttcatcctc ttcaccctcc tcggcgccat 180

cggcgcgctc ggagaccgcg gcaggttcgt cgacgagcag cccaccggcc tcgacaaggc 240

cgtcatcgcc cccggcaaag gcttccgctc cgccctcggc ctcagcgagg gagggccgct 300

gttcgggtcc accaagtcga acgagctgtt cgtggggcgg ctggcgcaac tggggatcgc 360

cttcttcatc atcggggaga ttatcacggg caagggcgcg ctggcgcagc ttaacatcga 420

gac 423

<210> 1078
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118b02b1

<400> 1078

agtatcgact caaatggaaa tattgtgttg gtcttacagt tcattggttc catgcgacac 60

aaagataccc cctgcaggct ggagcatcta tgaactttct gtgaactgat gagaggaagg 120

acatttttgt gttacttcgg cccaaataga aattgctcca ttattgagac aggcgctaca 180

atgtaacagc agggttttca taacactata gcgaacatgt ttacatacta catatgttta 240

aagatgcttg tagtttgtga ttttttgaaa catctctgaa atctgtatac atttcagttt 300

aatgctcc 308

<210> 1079
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118b03b1

<400> 1079

tcggggcacc tggaaaaacc ttacgggccc ccaatttaca acgcttggac tggaaaaacc 60

ttggggtagc cgaagttaat gccattgggc ccatcc 96

<210> 1080
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118c01b1

<400> 1080

attcctaata caacaggtca acgtggtatt tcctccctgt tgtttcaatt gcctgaactg 60

agctattgct gatattattg caactcgtaa aagggattcc attcctttga t 111

<210> 1081
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118c03b1

<400> 1081

acccccgtcc aggccgggcc cgttgtaccc ttattgatgg acgccgccgt ggagcgcctc 60

aagaccgggt tcgagaagtt caagaccgag gtctacgaca agaagcccga tttcttcgag 120

cccctcaagg ccggccaggc gcccaagtac atggtgttcg cgtgcgccga ctcccgtgtg 180

tgcccctcgg tcaccctggg cctggagccc ggcgaggcct tcaccatccg caacatcgcc 240

aacatggtcc cctcctactg caagaacaag tacgccggtg ttggatcggc catcgaatac 300

gccgtctgtg ctctcaaggt tgaggtcatc gtggtgattg gccacagccg ctgcggtgga 360

atcaaggctc tgctctcact c 381

<210> 1082
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118e01b1

<400> 1082

gatgataaga gagaagcaaa gcttgagatg gtgcaaactt tggcgtccat gaccggcctg 60

tcgcagggcg tgcgtctccc aggcccggcc ggcaggcgcg ccagcaggtt caccgtgagg 120

gcgtcgtcgg cggaggccga ggccgccggc cgccgcgcgg tccttggcct catggccagc 180

ggagtcgtcg ggagcgcgtt cgctcaggtg gtgcacgccg gcaccgtcgc ggccatcaag 240

gttggccccc cgccgccgct ctccggtgga ctccccggaa cggacaactc ggacgaggca 300

agggacttcg acctgccccc gaagaaccgg ttctacctgc agccgctgcc accggcggag 360

gctgctgtgc gggccaagga gtcggcccaa gaca 394

<210> 1083
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118e02b1

<400> 1083

cattcccagc gcagatcggc tcaacttctc attttttttc gtcccgacgg cgtttctcac 60

catgatggcg tccctcttcg cggccgtggc ggtcgaccgg cgcgcggcag ccccgcgccg 120

cggcctcgtg gtggcccggg ccgccaaggt cgagggccag caggagccgg cggtcaagat 180

ggcagccgtg gagcccgcca ccgacggtcg tcgtgccgtg gtgtttgctg ccgccgctgc 240

ggccttgtcg gccattggcg gggtggcgtt cgtcgagtcg gacgtcaaga aggggagttc 300

cgaggccaag aagaagtacg cccccgtctg cattaccatg cccaccgtca agatctgcca 360

caactgattc gggggagggg gcgaatatga tgcgggtggg cggtaaattt tgtacttcct 420

acgggtttat 430

<210> 1084
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118e03b1

<400> 1084

tctccacgct acgctatccg gaaccttccg gaaggttgct ttgccaccct cccttccgtt 60

ccgtccaacg gtgtcgtcgg gacagatctg cgctgtcggc ggcggcgacg gcgccatggg 120

cgagcaggcc gcggccgttt cctcctgcga gacgcctgct ccggcggagg tggggacagg 180

ggtcgggcag aggtcgctgc ccacgccgtt cttgaacaag acgtaccagc tggtggatga 240

cccggcggtc gacgatgtca tctcgtggag cgaggacggg tcggcgttca tcgtgtggcg 300

ccccgccgag ttcgcgcgcg accttctccc caagtacttc aagcacaata acttcttcag 360

cttcgtgcgc cagctcaaca cctacggatt taggaagatg gtgccggaca ggtgggagtt 420

cgcc 424

<210> 1085
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189118f01b1

<400> 1085

gtacggcgag gggcggtacg gcggtggcgg ctgttgcgag cgccttaaca cggaggaccc 60

gccgctgcgg aacacggtgg tgttgttccc gcacgggtgg acggcgatcc ggttcgtcgc 120

cgacaacgtg ggcgcgtggg cgttccactg ccacatcgag ccgcacctcc acatgggcat 180

gggcgccgtc tttgtcgaag gggcccacat gatacgcgag ctcgacgtgc caagggagac 240

catgatgtgc ggggtgatca ggac 264

<210> 1086
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189118f02b1

<400> 1086

ccgcttcatc gccttcaagc caccgggctg cgtggagtcc ggcaaggcct aaacagctca 60

ctcacgacag gccatatata aagtgccatt gcagttttgt caactctgac attgctttgg 120

gttttccttc tccatttatc tttcttattt gttcctaaga atatgtgtat gtccatgttc 180

atgtaccaac atggctcgag aaagcatgct cgtatgtgaa tgctatcggt ggctatgtat 240

atgcacggac gcataatatt atacaatatg tcaact 276

<210> 1087
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118f03b1

<400> 1087

gggcgagcga gcccgcctcc gtgcgtggag ggcaaaatgg gcaatgcctg tgttacgatt 60

ctttcattta tttttcattt tttatactag cttcttggtg gggtgtgtac caggttcgtt 120

gtcaattgaa tgtgtacatt tctatctttt tgagctatcg atgaataact tgttttcgga 180

tggcatattt ccttttttctt ttttggccaa ggtcaaaaaa aaaaaatata aataaaaaaa 240

aataaaataa ataaaaaaaa atactataat aataacctac aaatttatta taatataac 299

<210> 1088
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118g01b1

<400> 1088

tctctctctc tccattatcc tgttctctgt ctcccgtccc ccacgcctct ccttgttccc 60

agcctcttct ctctctctct ctcccttatc ctcttctctc tctcccgtcc cccacgcctc 120

tccttgttcc cagccaagat ccacctccac ctaccgccgt tccccaagcc gctgacgagc 180

accaggtcaa gctccgccgc ccctacctcc ttctccttcc tccttcctgt cttcctcgtt 240

ctctatctct cccccatacc tcacccccttg ccctctccct ctgaggcagc caacgccatg 300

gacggctgcg gagcttcgcg ccacccgacg tcaaccgcat cgtcgcccca agggatccgt 360

gcgcgtggcc gcgttgagcc gcacatgcgc tagatccatc cgccggtgtg tgccaccgta 420

gcaacaagtt cggcaatg 438

<210> 1089
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118g03b1

<400> 1089

agatcgagca ggtaccggcc atggactact accgtgagac ctacggcggg tacgggatgg 60

cgacgcccgg gtacgcggcg ccggtgccgt acggcatgtc gcaggtgaac atcgacggca 120

actacggcgg gaggccgatg ccgccgcagc ccacggtgaa gatctactgc cgcgccaacc 180

ccaactacgc catgtccgtc cgcaacggca aggtggtgct ggcgccggcc aaccccaagg 240

acgactacca gcactggatc aaggacatga ggtggagcac cagcatcaag gacgaggagg 300

gctaccccgc cttcgccatg gtgaacaagg ccaccgggca ggccatcaag cactccctcg 360

gccagtccca ccctgtgcgt ctggtgccgt acaacccaga ctaccttgac gagtccgtgc 420

tgtggacgga gagcaag 437

<210> 1090
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118h01b1

<400> 1090

tgtgtttcag gatacttcag ttcgaagtgg actgttcttg ctttgtcgtt gtattttctg 60

actgcgattt caatgaaaca ataagttgct ttcatcc 97

<210> 1091
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189118h02b1

<400> 1091

ccgagttgct gaatcagcta gatggtttta gctttgatga gaggataaag gtgatagctg 60

caaccaatcg tgcagatatt cttgatcctg ctttactccg ttctggtcgc ctggacagga 120

agatcgagtt ccctcatccg acggaagaag caagagctcg gattttgcaa attcactcaa 180

ggaagatgaa cgtacatcct gatgtcaact ttgaggagct ggctcgttca actgatgatt 240

tcaacggtgc acagctgaag gctgtttgtg tggaagctgg catgcttgct ctacgcaggg 300

acgctacaga ggtgatccat gaagatttca acgaaggcat tatccaagtg caagcaaaga 360

agaagtccag cttgaattat tacgcttagt tttccttgag taatcagaac gcttggtcca 420

gtgatgacct ctgtttgt 438

<210> 1092

<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a03b1

<400> 1092

ggtcagacat ggcacccttt aagctgaaga gttgcaaacc gacagagatt gcttctgaat 60

tttgtgtcca agcaagttgc atgtcctcaa tatgaacctc ttctcaaatt acattatcgt 120

gcaagttcta ttacgaatga tgatgtaatg tgtagaacag attagagtca acactatgat 180

gttacacttg tatctactgt gttatttagt ccaatgtgat acattagttt gttcc 235

<210> 1093
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a04b1

<400> 1093

ccttctctgc cggccgattt tcaagagcat tttctgcaag caatggacgt ttcgggcacc 60

ggagctggcg ccaagggcaa gaagggcgcg gccgggcgca aggccggcgg ccccaggaag 120

aagtcggtga cgcggtccgt caaggccggg ctccagttcc ccgtcggccg catcgggcgc 180

tacctcaaga agggccgcta cgcccagcgc gtgggcaccg gcgcccccgt ctacctcgcc 240

gccgtcctcg agtaccttgc cgccgagctg ctggagctcg ccggaaacgc cgccaaggac 300

aacaagaaga gccgcattat cccgcgccac ctgctgctcg ccgtcaggaa cgacgaggag 360

ctcggaaagc tgctggcggg cgtcaccatc gcgcacggcg gtgtgatccc caagatcaac 420

<210> 1094
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a05b1

<400> 1094

tcatgggaga aggtggtgta taggggaatc cttgcgggag agctctggct agcctagcct 60

tttacaggcc catgagaagc caacaacaca ttctttcagt gacatactac tccctcctaa 120

gcgtgctgct ctttcgtgac gtgtacctac gaacaagctt cttcatctgc agaacattcc 180

gtgtgcctgt taaaacagga ataaaaatga ataacctggt tgtggagcga ataaaatgat 240

ttccgagaaa aaaaaaaaat cacaagacct acctacactt ataaaaaaaa gcgaatgcga 300

ctagagagtt atcaccaaga gaagtgtttc acaattttt 339

<210> 1095
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a06b1

<400> 1095

tggttggtcg atggggtgtt gtattgtgtt gctttcgacg cctcgtgtca tcttgtgatg 60

ggcgttcttg tagtctgaac tgctaagtgt tatgtagttc ctttccggtt gaattgttat 120

tccctgtcga ggacgaaatg aaaatttggt tgccc 155

<210> 1096
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a08b1

<400> 1096

cagctcaaaa acaactggca acccttcgcg agcatgcgcg cgggggcacg caatcaatgg 60

cgcttgcagc gatcgccctc tccctcgtcc tcgtcgccgc ggcgccggcc gttggcacgt 120

ctagtgagga gcttgccgca gtgctccagt gccacccggc gccggcgctc acggacgcca 180

ccgacggcac ggctttccgg gccagcctcc tcctgctcct tagcgctctc ccctccgccg 240

ccgcgccgat gggcttcgcc tccctgcact ccgacggcgc gttcgcccgg ggggtctgct 300

ttggtgaccc caccacgctg tcttcaggct ccgagtgcgc ccggcgcctg tttgacgccg 360

ccaggaacct cacccgccga tgcggtgcca ccagc 395

<210> 1097
<211> 247
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a09b1

<400> 1097

tctttaagaa caccaccggg ccccattgtc cttttcacac ctctttttct ctctctctct 60

caatatgtat ctctctctcg ccatccccat tcaccagcta gctcgagcta gcttgctctt 120

ctctgctgca agctgctgat cggttctttg atctttccgg gagggaagcg ccgggagttg 180

gctgttctgt caggctggct cttgacatgt tcagatcgaa ggtccaggag atgatcctca 240

agaggag 247

<210> 1098
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119a12b1

<400> 1098

cagcgagcgc ggttcgaggg cggctctgga gagatgctcg gcttgcttgc atcggagcat 60

gctgatgcgc cggacgacca gcctggcgtc catgccgtcg gtgcccaagc aggtgcgcca 120

gggcagcggc ggcggcggcg gcgacgacga cgacaaggac aggcaggcgc gcgcgcggcc 180

gtcctcctcc gtatcggccg gcgcggtggg gacgggcggc ggtgcctgcg gtggctaccc 240

ctttcccggg cgggacgcct tcgccgggct gatgatcacc gcggcgttcc tgtccgcctg 300

cggcttctgc gccaagcccc ttggccccgg cgaggacacc tacatctaca ggtaccgccg 360

gcgtccctgc tttcccattc tttgctcgga aat 393

<210> 1099
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119b02b1

<400> 1099

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aagtgtcctt gcattccaaa ttgcagccag gggggccttc cgggaaggat tgaggaaagc 180

tggcccacga ctcctggagc ctataatgaa ggttgaagtg attacccctg aggagcattt 240

gggtgatgtt attggtgatt tgaactctag aagagggcaa gttaacagct tcggagataa 300

gccaggtgga ctgaaggagg ttgatgcttt cgtgccactt gccgagatgt tccagtatgt 360

cagcactctg aggggaatgt ccaaggggcg cgcgtcgtac acaatgcagc ttgccaagtt 420

cgacgttgtc ccacagcata tccagaacca gctctctgtg gcaaaagagg aagctgctgc 480

caaaatgttc attattccga gataatatat atga 514

<210> 1100
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119b04b1

<400> 1100

cctatctccc cggtgccgtt catgggctcc tttccaatcc cgtcgcctcc ggccgcgcga 60

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ccgtcgacgt cgacgtcttc ggttgcgccg gcgagcggcg gcaggagggg cgtgctcgcg 180

ctgggcgcgg ggttcctggc ctccgcggcg ctgctgtgcc cggccgggga cgccggcgcg 240

acgcgcatcg agtacttcgc gacggtcggg gacaagctct gcgacatgga cttcgccaag 300

tccgggctcg gctactgcga cgtcgaagtc ggcaccggcg tgcagcccaa gcgcggcgag 360

ctcatcaata tacactacac ggcgaggttc ccagacggga cggtgttcga cagcagctac 420

aagcgcggga ggccgctgac gatgcgcatc ggcgcaggca agattctccg agggcttcaa 480

caggggat 488

<210> 1101
<211> 70
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119b10b1

<400> 1101

aaaaaaaaaa aaaaagggaa aatgtgaaaa atttaaaacg gaaaaccgcg acaccaaaca 60

aaaaggggg 70

<210> 1102
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119b11b1

<400> 1102

gcagtaaagc atgagaagag ccaggtagaa gataaacttg aacaggaaaa gctgcagagc 60

ttccacctga agaaggaact agctgatgta gagaacaaaa atgcggagct tactaaggaa 120

ctccagtcag tccgcgatca actctccgac gaagcagcga gggcttccaa actcgaggat 180

ggagtttcag agattcaaca acggctgcag aagatggaaa cccttgaaaa ggagttcgaa 240

ttgcttcgga gtgaaagggg tggcgggtct gacaaatcag gttcaggcag caacaagagg 300

cccggcagcg tgggcttccg gaggtggtat ggagatgacg agcgctgaag cagggactct 360

tctctagggt cgcattcttc cattttggt cggtttctga tcatatatat ttttc 415

<210> 1103
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119b12b1

<400> 1103

acaccatgcc gttatacgga cagtttatag agctatatac ttgtgcataa agtgtataca 60

tacgggctgc aaggtctata attgtagctg ccgttgccac gccagttttt catcaattac 120

cgcttcaata agtttgccat tctgtaataa gagtcacaca gccttggcac agcattcaga 180

aattcaattc ttgtaaagtt gtaatactcc ctccgttcct caatataagg tgtattattt 240

ttcc 244

<210> 1104
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c01b1

<400> 1104

ggatggaaag tttgggtctt gtcgggggga aaattgggaa aaaaaaaccg gaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggggggccct tttaaaggac caaagtttac 180

ttccccgggc ttgcaaggta aaacttttt tatggggcca ccaaaaaaaa attaagg 237

<210> 1105
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c03b1

<400> 1105

gctggtgaga agcctgttca agggaggatt tcacctccgc aacatgatta tcatgcctga 60

gatgatcgga agcgtcgtgg gcatctacaa tggcaagtgc ttcaaccagg tggagatcaa 120

gccggagatg attgggcact acctggcaga gttctccctg tcgtacaagc cggtgaagca 180

cgggaggcct ggtatcggtg ccacccactc gtcgaggttc attcctctca agtgagaata 240

tggtcaggaa aattgtctga gatgtctgga atccagtgtt cttatcctag tcaaatgtag 300

cacctgatat accgtctgtc agtctagtgg tggagcagct ccctttgaac cttgaactaa 360

tccagttcca gattttgaag ttatcatgag gaggatcgaa catgtttctt tccttaaagt 420

tgtcatctgt tgcgatttgt gtgctcttct aaattttgat cagatttatc ggttt 475

<210> 1106
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c04b1

<400> 1106

aaaaaccgga aaaaacccaa aaaaaaaaaa aaaaaagaaa aaataccact atg 53

<210> 1107
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c05b1

<400> 1107

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aagtcgtgta ctgggtattg tcacatctaa gaccatttga attgttagtg gtcacgtgag 120

gcatctgtgt ttgatgcact tttacatccg agacatttga atttgcatcg gtgtgttgat 180

gcaagttgtc cttcaccatg gtttgtatgt gccaccacta tggcaggatg gtttatccac 240

gctattgtgc act 253

<210> 1108
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c08b1

<400> 1108

ccaccacacc ggagaggggg gaattttagc gtttatgtcg gggcgcggca agggaggcaa 60

gggtctgggc aagggcggcg ccaagcgcca ccggaaggtc ctccgggaca acatccaggg 120

tatcaccaag ccggcgatcc gtcgtttggc gcgtcgtggc ggcgtgaagc gcatctcggg 180

gctcatctac gaggagaccc gcggtgtgct caagatcttt ctcgagaacg ttattcgtga 240

cgccgttacc tacaccgagc acgcccgccg caagaccgtt accgccatgg acgtcgtcta 300

cgcacttaag cgccagggac gcaccctcta ccgattcgga ggctaggtca ccaccaccag 360

attagagtgt ctgggg 376

<210> 1109
<211> 402
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119c09b1

<400> 1109

ctcaccctcc cgtgcttcac gacccttgt tatcatgtta caccaccgac ccggccggtc 60

cggaccggtc cggtcccggc tccggaagtc tccagaaccc gcacaaccac cgncacgcgg 120

gcccgcatgg cagggtcacg ccccccacgc gcctatgcct tcggcgagac ctctttcctc 180

cccctcataa ataccgcgcc caagcctcgc cgnagatcga ccgggctcgc cctctctggt 240

ttgctactcc tggtgctgct aatcggactc ccggccgtcc ccgccgtcgc cgccaacatg 300

accgaggtct gcgtcaaggc cgccgttggt caccccgaca cgctccgaga ctgttccttc 360

tcgcagaggg tgctgctcac gctggaggag aagaaggtgc cc 402

<210> 1110
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c11b1

<400> 1110

ctcaagcacg agcacccggg agggcgttca ccacccacgc cgtcgtggct ctcctggccg 60

acgtcctcgc gctggcgtcc ggcgcggcgt cgcaggcgcc ggcggcgggg cctgcggagc 120

cggcggggga ctgcggctcc gcgctgacgg gccttaccgg cttgcctccc ctacattttg 180

acaggggcca ctcatggcaa gcctgccaag gagtgctgcg ccagtttcaa ggccgcgctt 240

gccagccccg ccagcgtcgt ctgccatttg caacgccttc tgtaaggact accggatcct 300

caagaacctt acccgcgcca agggccttcc cgccgtatgc ggtggcaacc cggtcgtcct 360

tatcaactgc agcctgaaac tgcccg 386

<210> 1111
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119c12b1

<400> 1111

gcctcctcct agcaagctat gtaccttcat agttcagcca tggcccccac cgggatggcc 60

tcgccggcca cctccgtcgc tcctttccag gggctcaagt ccaccgccgg cctccccgtc 120

agccgccgct ccaacggcgc tagcctcggc agcgtcagca acggtggaag gatcaggtgc 180

atgcaggtgt ggcccattga gggcatcaag aagttcgaga ccctgttcta cttgccaccg 240

ctcagtacgg aggccctcct caagcaggtc gactacctga tccgctccaa gtgggtgcct 300

tgccttgagt ttagcaaggt tgggttcatc ttccgtgagc acaacgcatc ccctgggtac 360

tatgatggcc cgttctggac aatgtggaag ct 392

<210> 1112
<211> 441
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119d02b1

<400> 1112

tttaacaact gagcagtttt gtgccgatgt tgttgctcac catgatggcg tccctctccg 60

cggccgtggc ggtcgaccgg tgcgcggcag tcccgcgccg tggcctcgtg gtggcccggg 120

ccgtcaaggt cgagggccag caggagccgg tggccaagat ggcagtcgtg gagcccgtca 180

ccgacggccg ccgtgccgtg gtgtttgctg ccgccgctgc ggccttgtcg gccattggcg 240

gggtggcgtt cgccgagtcg gacgtcaaga aggggagttt ccgaggccaa gaagaagtac 300

gcccccgtct gcatcaccat gcccaccgtc aagatctgtc acaactgatc gtggggaggg 360

ggcgatgatg atgcgggtgg gcggtaaata ttgnactatc gtccggttta tcttttgttg 420

aagttcgagc tttgatgcat a 441

<210> 1113
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d03b1

<400> 1113

ccttttgggg tgggcttaag gcagatgtct ttgccaagta ccaggcctac gagctcatcc 60

atgccaggtg ggccatgctc ggcgccgccg gattcatcat ccccgaggcg ctcaacaagt 120

tcggcgcaaa ctgcggtccc gaggccgttt ggttcaagac tggcgccctt ctccttgacg 180

gcaacaccct caactacttc ggcaacagca tccccatcaa cctgatcctc gccgtcgtcg 240

ccgaggtcgt cctcgtcgga ggcgccgagt actacaggat caccaacgga ctggaatttg 300

atgacaagct ccaccccggt ggcccattcg acccgctcgg actcgccacc gaccccgacc 360

aggcggcgct gctcaaggtg aaggagatca agaacggacg gctggtcatg ttctccatgc 420

tgggctttt 429

<210> 1114
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d04b1

<400> 1114

ggggccgttc tgattctcca ccaggacggg acccccatca ctgctgagaa gatcgcgacg 60

gtggtgaagg ctgccggaat caatgtcgag gcctactggc ccgcgctctt cgccaagctc 120

ctggagaaga ggagcgtcca tgacctcatc ctttccgtcg gatctggtgg aggcggtgct 180

ccagctgctg ctgctgctgc cccggctgct ggtggagctg ctgccgctgc agagaagaaa 240

gaacagaaaa aggatgaggc ttatgaagag agcgatgatg acatgggctc tagcttgttc 300

gactaagcag ttcagattcc gttctcctgt ggaatcttct atgcttagga ttactcatct 360

tatgtgctt 369

<210> 1115
<211> 233
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d06b1

<400> 1115

gaccgatcat actagactgc tattgagttt ctactacttg ccacctgctt gttattaaaa 60

tggttttgca tataggagta tagtagtact gtctatggac ttgagtctaa cagggatgca 120

tatcgtccga caaagtaagg caatgcgatt atgcactcgg taaggattcg agaaaccggc 180

agccattttt cagttatgaa aagacggcgc acagagtcct cttccggttg aaa 233

<210> 1116
<211> 280
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119d07b1

<400> 1116

ccacaacaat tttcccagag caagtgaaaa ttttaaagcg tttctttcaa ncacaagaac 60

cttncccata caaacaatat ccacaacaac aaccatctgg gagcgacgtt ataagtatca 120

gtggcagatg aaatgaagag atgttatact agacgggtga atcatcattg ttagtaaatg 180

gagcataatg taacgatgat aaataaagtg atgtgcacca tcatgtgtaa cctcgacctg 240

tactagttca aacatgggaa taaaagacaa ataagttctt 280

<210> 1117
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d08b1

<400> 1117

agccgaagca ctagaggggc gattgctcgc atggcactgc tcgtcgtgtt cgccgtgctc 60

gcggcactgg ctgtggcgga gatggcgtct ggggcggtga cctgcggcga cgtgacgtcc 120

gccatcgcgc cgtgcatgtc ctacgcgacg gggaaggcgt tggcaccgtc tgcggggtgc 180

tgcagcgggg tgaggaccct gaacggcaag gcgtccacct cggccgaccg gctaggcggc 240

gtgccgctgc ctcaagaacc tggcggggtt gttcaagggc attagcatgg gcaacgccgg 300

caccattccc ggtcccacgc gttcgctacg cgttccgttt aatatttaaa tttttctgtt 360

tgtttttttct cttcattcct tttccttatt attcctatat tt 402

<210> 1118
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d09b1

<400> 1118

tcgacaacct gcgccagggg cagtttttca gctttatggc gttcaggcca ccgggccgcg 60

aggagtctgg caaggcctaa acttcgagtt aaaacaatgg cctatgtatg attgttcttt 120

gtgaacttca cttttgtcca ggactctgct ttccgaccag agcatatttt tccttcggta 180

tgatctgtgt ttgtacgaac ataggtttgt ggagcatgca tatgtaaatt ctagcaccgg 240

ctacacatat tcaacaccag tgtgatattt attatattac aacaagcgga ccattgtcct 300

gctggtaatt ctcgg 315

<210> 1119
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119d11b1

<400> 1119

ggggaaaggc gatggaaggg gagattttaa agcttaggcg cggactggga gcagaaaact 60

ccaccccgac ggaggccatt ccggttcgct gccggcccgt tcctccttct ccttgccggc 120

gttcccaaga ggtcccatgg aggatgacgg tcctagccgg agcggcctgc cgccggtcgg 180

ggagtgcgaa tggagggagg agctgtggca gcagcagtcc caggtcgagg cgctgcgcga 240

cctgctcgtg gtggtcaagg ttcggatgcg gcgcttctag gacgatttca gccgggagct 300

ctagcacctg tgtcgcatgg tcaatgacca tcgccaccct gctggcgttc cttaaattca 360

atgccaggat ca 372

<210> 1120
<211> 406
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119d12b1

<400> 1120

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ccgnccttgt cgccgcctcc gccaccgtgg ccctcgccgt cgacgccccg gtcatggccc 120

cggcccccgg cgccgtcgtc gtcggctccg tcgccgcctt cgttccggcc gttggcgccg 180

agctcggggc caccgtgctc tccttcttcg cctactacct gcagtaagcg cgccccggcc 240

cgagtcagtt tgcttcgagg aggaggaagg caggaagaag aagatcacta aattcgcttt 300

gtatggctct acgctacgct gattcaaggc gcgcgcgtgc gttttgaacg atgcatgcgc 360

gtgctttgat ttatatgtct tgatttaata ttgtttcttc ttcctt 406

<210> 1121
<211> 173
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e01b1

<400> 1121

caggcacccg gtggtgtttt ctggggtcct ttcgaacgac tgcgcggtcg accaaacaga 60

caagcacagt atctgcgaag actcattcga gtcggcaacc tatgttagta tatcggatat 120

ggccatgaat ggggctcgat tgggctgctc caagcgacag ctgtaggtcc tgg 173

<210> 1122
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e02b1

<400> 1122

ggggcggcag ggagcggttg acggactgtt ctgtgtcatg ggatccacca caatggggac 60

ttaagccccc ctggcaagaa acttagccac caccgggggg tccccgctgg ggttg 115

<210> 1123
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e03b1

<400> 1123

tgacgtacgc gagcaccaac tagaaggtca agtggaccct ggacggcatc cagatcgaga 60

tgcaggccac cgaccccagc gaaatgagcc tcgacgtgat caaggagcgc gcgcactaag 120

gcagatcatc caatgccctc gcaatatgga tttatgtcaa atatagattt ggcggtgtga 180

ctcttgaaac tttcttgatg atttgtggct ttgttaccgt gtcgaaaggc cctcctcccg 240

tggcccgtgt gaccacggag ggcttgctct atcatgtaat ctgttctttt tcttgtgccc 300

attgatatgc cgggccttat gctgctgcac tgcactgttc ttccaagtta cgggtataaa 360

taattaaatg ttctgtttgg attc 384

<210> 1124
<211> 73
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e04b1

<400> 1124

aaaaaaaggg aaaaataaaa gggaaaaata tataaaaaaa aacgaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaa 73

<210> 1125
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e05b1

<400> 1125

ctgccctgcc cagaccgccg ttcaccggct cccttgagct cagaggcgcc accaagaacc 60

gcacggaaga gagcggatcg atggcgatgg ccggcggagc cccgccggcg ccgctgccgg 120

tggtggggca ccagttctgc gcgccctacg tggtgccgct gacggtgacc aagaaggcgc 180

tcagcctctc cgacggcgac ttcgccatca cggacgccaa cggcgccgtc gtgctcaagg 240

tcaagggcgc catcttcagc atccggagcc gtcgcaccat cctcgacggc gccgggatgc 300

ccctcctcac catgcaggaa aaggtgttca gcatgcacca ccgatgggag gttttcagag 360

gggacagcac caacgcaggt gacctgctct tcaccgtgaa gacaacttcg ctgatccaac 420

tcaagaccga gatggatgtc ttcttggcag ggaacaccgc gcagcaggtc tgcgacttca 480

gatcag 486

<210> 1126
<211> 255
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e08b1

<400> 1126

caaggggggt tgtggcgcaa gcattatggc tggtgcttgt cttcgaggtg cgatccgcgg 60

atacgctgag cctggagcct gcagcaccgc gtcagtgcca ccgggtgctg gtattaacag 120

acactgccaa ccacgctgga tttctgaaca aaaaaaaaaa gctgggcagc ggttttagat 180

ggatccacgc tccgataggc ttgcatcgcc atgcactccg tctgctctag cgcccggtgg 240

gtctgtttta gtgac 255

<210> 1127
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e10b1

<400> 1127

gccgaacctg accggggagg gtggggaaaa taaaaatgct gagccgcgcc gcccgccgcc 60

tcgcgtaccg cgccgacgtt gtcggcagcg gctccatgag ccgcagggcc ctcgcgacgg 120

cgcaggcgcc cgcggaggcg ggcgaggacc ccgccttcct ggaggcgtgg aagaaggtga 180

ccacaatcat tgagcccccc cagacgccca tgtcggtcat gaagtcccgc ccgcccacgc 240

cggcctacat tccctccaag ctcaccgtga actttgtcct cccctacaag tacgagatca 300

ccaacaagga ggttgacatg gtaatggtac cggctacaac tggactgatg ggtttttgc 360

caggccatgg tttcacaatt gcagagctca agcctggt 398

<210> 1128
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119e11b1

<400> 1128

ctggatgact attaaggggc acatttttga ttttaacgct atcttctgga atcggctagc 60

tagctgtatg atagcttcag gatgtgatga tggcagtttc tcaattcgcg atcttagatt 120

cataaaggat gatggcgcca tggttgcgca tttcgagttc cacaagcacc cgattacatc 180

tgtggaatgg agtccacatg aagcatcaac tctggctgta tcatctgctg atcatcaact 240

cacgtacctg tccctacgat taatttttt ttcgattaag tgctgctatc ctacgacatt 300

tcgaattctc ttgctgtaac atgctggatt gtttgtcttc agaatttgag atctttcatt 360

ggaaaaagat 370

<210> 1129

<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119f01b1

<400> 1129

gacaactccc tcgcgtcgtc tctccggggc gacccggggg ccccaaatgc ctccaccgcc 60

ggccggcaat ctgcttctcc cctgccgccg ctgccgccgg cccttgccgc ggtggcggcg 120

ggccccgttc ctcgaagggg agggggacct ccggccgatg cgtggggcgc ggcggcggat 180

cttgggcccc ggggcggcgg cctcggtctt ggcgacgacg gctgctgcgg ctgcttgggc 240

ggcgcggtgg ttgggcctgg ggcggtgctg ctgcggccat gctgggtgct cgcggtggag 300

gaagctcggt cctcctgctg cacgacgttc ttcggcgcga cgactccggc gacttcgcgg 360

gcttgcgtcg ccgaggtcct tctccagctg gcctaggcgg gtgggcagcc ccctggtctg 420

cctgtgcgag ctcgtacccg tggcccgctt gtcgatggtg ttgccggctc gt 472

<210> 1130
<211> 481
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119f02b1

<400> 1130

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aatggcgtcg ctcgtcgccg tccagccggt cgccgtgagg ggcctggccg gcagctccat 120

ctccggccgc aagctcgccg tgcggaccgc ctccgccgcc gtctcccgct ccacgcgcag 180

ggctcgcggg gcggcggtgg tggccaagta cggggagaag agcgtctact tcgacctgga 240

cgacatggcc aacacgacgg ggcagtggga cctgtactgc agcgacgcgg cgtcgcccta 300

caacggcctg cagagcaagt tcttcaacac cttcgccgcg cccttcacca agcgggggct 360

gctgctcaag gtgctgctgc tcggcggcgg ctcgctgatc gcctacgtca gcgccaccgn 420

ctcccccgac ctgctcccca tcaagagggg actcagctgc cgtccacccc gggaccacgc 480

g 481

<210> 1131
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119f03b1

<400> 1131

tcagcataac tggttctagt ctcacgtcga agtggtttgg agacgctgag aagctcacca 60

aagccctttt ctcgtttgca agtcggctag ctcctgttat catatttgtg gatgaggttg 120

acagcttact tggtgcaagg ggtggtgcaa tggagcatga agcaacgaga aggatgcgca 180

atgaatttat ggcagcttgg gatggtctaa ggtccaaaga cagtcaaagg atccttattc 240

ttggtgcaac aaaccgtcca tttgatctag atgacgctgt aatacgtcgt ttgcctagga 300

ggatatacgt ggaccttccg gatgcgcaga ataggatgaa aattctcaag atattacttg 360

ccaaagaaaa catagaatgt gaatttggat ttgacgaact agccaatgca acagaaggtt 420

actctgggag tgacttgaag aacctatgcg tagctgcagc atacaggcca gttcatgaac 480

t 481

<210> 1132
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119f04b1

<400> 1132

ctgccccaaa ggttttcctg aattggtcct tgagtccaac tcagatgaac cagacaccat 60

tgagtattgc aacttgggat gtaggtcttc cgtgtgtgac tacatggtca acgcagctgc 120

tgacgatgaa gagatgaaac tctatgtgga aaattgtggc gatgcttgtg tcaatttctg 180

taacggtgat gctggcctca cttcccttga tgcgtaatga tgcgtatcca tggtctgaga 240

tttcacaggg caaggtcgtg tctcaccttt gcgttcaata aaattggatc ccatcgagag 300

tatccaaacc agtgtgtcac tctgttttat gtgtgtgtat ttccattcct tgttcgaaat 360

aaaagccatc atgatggatg ccatgttgct gccctgatgt actaccatga ctgagatata 420

atggtatatg ttgtc 435

<210> 1133
<211> 531
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119f05b1

<400> 1133

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catcaagcga gatctctgtc aataccaaca agagcaagag caagagcaaa aaatcgaagt 120

ctcatgcaag cagaaggtcg ctgactagcc caggcagcaa ttcagtcgga cgaagcagca 180

ccgataatct gtcaaaggat tataagcatg cgaagagaga gagctcaggc aaggttgcca 240

agtctgacaa cgctgatcaa gagcctcgca tgagcaacag cactccattg ccaagttaca 300

tgcagttcac agaatctgca agagcaaagg cggctgctct atccccaaag ttaagcccag 360

atgtgcaaga caacaacccg agaaagaggc attctttgcc catcacaaac ggtaaaaacg 420

aaacatctcc tcgcatgcaa cggtcatctt cccaagccca gcataatgtg aagagcagcg 480

ttgctgttcc tcacaatcca tctgataaga ggtggaatat atgatggatg g 531

<210> 1134
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119f08b1

<400> 1134

acgaagacag gcaacgagag gcgtgagcgt ttataatggc attaagggtg gtgtactcca 60

acaggatccc gctggtgcgc gccatggaga acctcctggc cgcgtcctcc gggtctgctc 120

tcaggccggc tgccgtcgcc ggcggcgttc gcgggtacaa cgccggcgcg cccctccgta 180

gctacgaccg ggacgaggcg gtcgagcgca gcccccgcgg cggcgcgcgc gagcgcgacg 240

tcggcgtgcc cagcttcttc ttagatgtgt tccgtgatcc gttcagcgcg ccgcagagcc 300

tgggccggct gctgagcatg ctggaccacg tgtcggcg 338

<210> 1135
<211> 76
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119f09b1

<400> 1135

tcgtgagaga gaagagaggg ggcgatgtag cttgttgggc tcaagttggt ggacggagct 60

cacgaggact cgatct 76

<210> 1136
<211> 113
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119f10b1

<400> 1136

agagaaactt gaaatccctc tcttgcttgt cgtgacactc agagaatagt gaaaccattt 60

gatatcctca ttagtcagct ttcattttct tgaattgcat gtttgtaatc tac 113

<210> 1137
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119f12b1

<400> 1137

ccggcgacag cccaatgggc acgcttgagg atttgtgtgc gtctggcgac cgctacgccg 60

gcggaacgac cgggcttctt atctgggccg tgaccctcgc cggcctcctt ggtgggggcg 120

tgctcctcgt atacaacacc agcgctttgg ccggctaaga gagcatctac gtgtaacaca 180

gggccgggtc tctgcttgca tgcacgtctc tgtaatctac gtagctacct cctgtgaatg 240

tatgtgatca acgatgcaca gtgattgatt cgaacagatg gcttatgttt gt 292

<210> 1138
<211> 158
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189119g01b1

<400> 1138

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aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gggggggctt ttaaagggac caagtttacc 120

tccccgggct gggcacggca aaacttttt ttgggggt 158

<210> 1139
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g02b1

<400> 1139

atgtggcaag gttgctttta tactaagctt tgacgagaac atggaccgcg acgtcaagtt 60

cttcacggag acagaggaga acaaccagat gcgtggccca aggactgccg tcccgtattt 120

tctctgactt cagttgtaca attttagaag tcgctgtttt aagctgtaag ggttaaaaga 180

cgaaccggag gtggttattg ttgtagggtt cagatgatag tccaatctga tgcgttttat 240

ttctcgcgct tcttttaacc acatgtacaa tagatccttg ggagcatcat tactcctgta 300

ttccttctat gacagtgtcc aattttgctt ctttttattg tttattatta ttattggtat 360

acatgttgta cgggcgctat ttatatgtca catatatgca tttggcaaca tac 413

<210> 1140
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g03b1

<400> 1140

tctccatggc cttctccttg gccagcaccg ttacagccgt gcgcgcggcg ggcgcattca 60

cctcgggccg cgtctcgagc tcgccgccgc cgtcgctgtc gtcgccgttc ctcccgcggg 120

tggccggcgc gatcgtcgcg aggaggggag gacgcggggc ccgtgcggcg gcctcgcccg 180

tgcgcgcgca ggccgccgga gccgcgaaga agaacgtgct ggtcgtcaac accaacagcg 240

gaggccacgc ggtcatcggg ttctacttcg ccaaggcgct gctcgcggcg gggcatgccg 300

tcaccgtgct caccgtcggc gacgagggct ccgacaagat gaagaagctc gcgttctccc 360

gcttctcgga gctgacgagc gccggggcca agacggtgtg gggtgacccg gcggacgtct 420

gcgcggccgt cggcggagcg ttcttcgacg tcgtgctgga gaaca 465

<210> 1141
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g04b1

<400> 1141

tgggcggacg cgggggctat tccaggggcg attccgtgac gccgccaggc cgccgtccct 60

gagcaatgga gtcgaggaag ccgcagcgct ccgctctcgg cgacagctat gtggtccccg 120

gcgacgtcat cctggacctc gccgacatga ccaaccagac catcaagctc ggcgccggtc 180

tgcgccagga ttgtgacact atccaggcaa ctagtgctgg gaggcttcga ctgtccaagc 240

ccaacaagta ctgggtggag aactcccaga agaggtatgt accttctgta gaagatacgg 300

atcttggtat tggagttgac accaaaccag ataacttctt ggtggacata aaggggccta 360

atttggcctt tttaccagtt ctttcatttg aaggtggtac aaggaggaac ataccaaagt 420

ttgagatggg tacattaata tatgccagaa tggtgaaagc aaatagcatt atgaatgcag 480

agctttcatg catg 494

<210> 1142
<211> 123
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g05b1

<400> 1142

tgtacaaggg cgaggctttc ttgggcatct cggagtgccg gccgcggcac ataacgcacg 60

aggagtggaa ggacaagtgc acgccaaggt ccatgagcga ggcggcggcg ccggcgacca 120

gcc 123

<210> 1143
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g06b1

<400> 1143

ttaggtccta tttggttcgg ttgtgtggat ttttaaaagc agctgcgaaa aagttgctgc 60

gaaaaacagc tgtggaaaat ctcatgtgaa aaagatgtag gtcatttggc aaactagctg 120

atatagcttt ttcaaatttt ggcctgcagc ggaatcattt tagaaagcac gtcctgggtt 180

gcttccgctt ttggttcaga ttttgacagc ggatttctga aatcggattc tgttgggttt 240

gacctt 246

<210> 1144
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g07b1

<400> 1144

ccgcccacgc gtccggagga acccttttcga cgtgcatggg gacagcagtg ctgcccgtcg 60

cccacaagct ctcgctcgcc tccccttcc tcccgcgcca ccgccgggcc tgccgccccc 120

ccgcccagca gcactgccgg cgccggcgcc atggggcggt ggtggcgtac atggagccgg 180

acccgaactc gccggcggcc atcctggggc gcatcgtcgg ggccctcccc gtggtgggcc 240

tcgtggcgcg catcctgagc gacgacggcg gcgtcggcgg cgacaccgtc gacttcgccg 300

agttccgccg ccgcgtcagc aagaagtgca ccgtcatgga ctcccaggcc ttctacgact 360

tcaacgaccg ccgcggcaag gtgggagacc ccttctacgt gctgctctgc tgctggctgg 420

ccg 423

<210> 1145
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g08b1

<400> 1145

cccacctcac ctcctccgtg ccttttgccg acttttcgtc aaggttccgg cggcgatggc 60

ggcgaggctc gcgcagctgc ggaccaaggc ggcgcaggcg gcggaattcg cctcgaagca 120

cggcggcgcc tactacaagg aggcgatgga gaagaacaag cagtacgtcg tgcagcctcc 180

ctccgtggag aagtgccagg agctcttcaa gcagctcttc tacacgcgcc tcgcgagtct 240

accaggccgc tatgaagcat tgtggaaaga ggttgatggt gtcaagcagc tttggaagaa 300

caggaaggag ctcaaggtgg aggaccttgg aattgcaaca ctgtttgggg ttgagcttta 360

tgcatggttc tgcgtaggcg agattgcagg cagaggattc accttaaccg gctataaggt 420

ctgaatta 428

<210> 1146
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g09b1

<400> 1146

ccatcttctt cctccccgga actcgttgct ccttccagaa ccgaagctca gtcccgtggc 60

cacgcagaac aaaatgcagc gagcaattca agctatcgga tcacatggca gtgtgctcaa 120

atctgctgtc ctgcaacaca tcagtgttgt gaagcctgct atgctgcctg ctgtgttccc 180

gcgcttcatg tcagtatcac ctgctcaaat agaggagagt ggatttgaga gcagcactgt 240

tgcggacatt ttgaagtcca aagggaagag tgctgatgga tcatggctct ggtgcaccac 300

tgatgacagt gtctatgatg ctgtcaaatc gatgacacac cacaatgtgg gagctttggt 360

ggttgttaaa cccggggaag ataaattaat tgctggcatc gtcacagaga gaga 414

<210> 1147
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119g10b1

<400> 1147

cacaacttag tttctgggac gcttttgata ttatcatgga ctcgtggtga agattgtgtt 60

ttgcaatttg agtcattttg ttacctttta gtcgaatatg tattctgcac tttgacattt 120

gaattctttc aggtgcttag ataaggctgc tgtagtctta ggggaccaag agataaagtg 180

atgcggagca tccttccatc atccccatgg actctacagc aacacatcca acccctcaag 240

gacctatgac tcgagcacgt gcaagagctc ttgaaaccga ggtgacatca ctcctctcac 300

aattcccttt cgattcacat gagacatggt tactacctca aatggaaacg ctatgcatac 360

tcaggtacca aggagttcac cgtgaagaag ctaggaagca aggagaaccg gaagcggaag 420

acatg 425

<210> 1148
<211> 430
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119g12b1

<400> 1148

tgggcttcga caagtccacc tcctttctcc tctttgcatc cggccctgag ggcaaggtgc 60

cgctcttctg gggaatcacc gccgacggct gcgtcgcctt ctccgacgac atcgacctgc 120

tgaaaggatc ttgcggcaag tcactggcgc ctttcccgca aggttgcttc tactggaacg 180

ctcttggagg cctcaagtcg tacgagaatc ccaagaacaa ggtcaccgct gtgcctgcag 240

atgaggagga aatctgtggt gcaactttca tggtggaagg gtctaccgtt gtcgcggcac 300

ttcagtagga gattctctcg tctccgtcgc tgggcaaagc aagcaaggcc gntctcctgt 360

atatggtggt ggtgtaatat aatgccacaa ggcgcgtgtg ctactctctt tgtgaactta 420

tgtgaactgt 430

<210> 1149
<211> 528
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119h01b1

<400> 1149

gggatatatc catggcgctc ttggctgcaa ggatcgtcgt cgtcgtgagc ggccttgtca 60

tgatgatgat gatgatggca tgtctcctgg cgccagcggg cgctgacgag tgcatggact 120

tgtgccttca tgattgcgcc gtcaagggga agaacttgac ccaggagcaa tgccagtacg 180

catgcaatta cggctgcccc tttggcgccg cccagcacgc tctatcgaat gcccccgcca 240

ttgccaggaa tggcgggaag accgtccatg tcctcatcca tgtcctcgca gcaacgatgt 300

ggctctagct agcagctgct ccttcatcgc ccgctccagc atcggcacca atctggagct 360

cctccatcgg cgtcaaaggc catcaaagca gcaagcaagc gtcaagatgt tatagcggat 420

aatacacgta tgctatgttg catgtatgta tgtgcttatg tatctttatt tatcaagcgt 480

gaagatgctg ttatatcgga tatataatat acttatgcta tnttttgc 528

<210> 1150
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h02b1

<400> 1150

ttttgttgtt gacaggaatg ttatggggcg tgtttttgag gctagagacg agctccacag 60

gatgctgaat gaggatgagc tgcgtgatgc tgtgttgctt gtatttgcaa acaaacaaga 120

tcttcctaat gccatgaatg ctgctgaaat caccgacaag cttggtctgc actccctgcg 180

ccagcggtac tggtacattc agagcacttg tgcgacgtct ggcgaagggt tgtacgaggg 240

acttgactgg ctcttcaaca acattgccaa caaggcttga agcgccttga caagtgcttc 300

atcaagaaac aaacgtgctg gatgtctcaa caactcactg ctaccatttt acatattgtg 360

atatatatac actgtacaag agatagtatg tgtgcgtatg tgacaggcca taatctccct 420

tctttaagtg agctagtatt taggtagggt ggctcttttt gtatggaatt tatcagttgc 480

cgttccgttg ttttaccagg attaatgagt tcacatgtgc gttcgacccc tatcttttta 540

gtt 543

<210> 1151
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h03b1

<400> 1151

tctcttttgg ttggctaatc tcgcaggggg tactctgtcg tcctcggctg catgtggttt 60

gtcttgagct tcgtactact gtctactagt gcttgtaact ttcttttctt atcccggtct 120

gctcactgca tgctagcgag tgatgggtgt gtatgtgtgt actttgtgta cgctccatgt 180

gtaaattctc gcgtgtgtgg tgtggtgttc accatgttta accactctac tatggtaaga 240

cactcttcac ctcagagtct gcttttcctt ttataacata agatttctgg gtggtctttc 300

tattggattc cagc 314

<210> 1152
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h04b1

<400> 1152

ttgggcggac gcgggggtc tgtatgggcg ctttcgcgac tgtctccgat gacgtcgccg 60

ccatcgagcg cgcgaacgag gccgcacgcg ggcagggagt gtggtgggag ctgctgatca 120

acccgagccg gcccgtgcgc cgcatgctcg tcgccggcct tgggctcatg ttcatccagc 180

aggccacggg cgtggactgc gtggtgatgt acagcccgcg ggtgttcgag aaggccggga 240

tgaagaacag gaccaactcg ctgggggcga tcatggcggg ggccgcgtgc aagaccttct 300

ttatcccgat cgcgacgctt ctccttgacc gggtcggtag gaggccgctg ctgctagcca 360

gcggcggcgg gatggacatc tttctgttca cgcttcgcac gtccctgctt atgctcgacc 420

ggcggccg 428

<210> 1153
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h07b1

<400> 1153

cattcgatgg cccaatgggg cttggggact tttttaggcg acttggcatg aaccggacct 60

gctacagaat gtgaagaggg tgagtccatg gctggttgag ctggtctcaa acatgccggc 120

cattcacctc gctccgttct cgccgcctcg gaagaagctc tgtgttccgt tctaccccga 180

cctcccggtc gacggccagt ttccggcccc gatgttccac ggaaacccac tcggacgcgg 240

cggcgtcggt ccgatgtgct attttccgga cggcactcct gcaggcatac agggagccag 300

gcatgctcaa tttggtatat ctctatcaga tctccacctt aacaaactgc agtcgagtct 360

gtcaccgcac gggcttcacc aggtcgatca cggcgggcag ccga 404

<210> 1154
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h08b1

<400> 1154

ggactgcatc ctctccgggg gcacttttac atatcacact gctcgtcctt gcctccgaac 60

aattacatct acagaccacc ggatatgtgc gcgcgccgcc ggttaccgag cgccggccat 120

gttggtgcat ggcgggtaca cggagcactt cgtgggcagg gggtccagtc ttgcccgacg 180

cgttttaagc gccacccgcc gccttctccg tcaccgactt cgctacggag tcagagcctt 240

ctctctcctc cttctcatcg ggcaggaaga cgcgccccg 279

<210> 1155
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h09b1

<400> 1155

caacctcacc gacttcgggg tcgcctacgc cgttcgccgc gtcgtcaggg cagccgcgga 60

gggcatcgcg cggtgcccgg gctgcaagac cagcctcatc accttcctgc ggacctactc 120

gcccgaccac ttcgagcagg gctcgtggtt cgacggcggc tactgcaaca ggacggcgcc 180

gctgcaggag cgggaggtga gcatggagag catcgcgtgg gagctgagga gggtgcagag 240

ggaggagatg aggcgggtga gggcgaccaa gaggaggttc ggggtgctgg acgtgaccaa 300

ggccatgatg atgcgcgccg accgccaccc cgacaatcac ttcgacagca ggtggaggag 360

gaacggcagc gactgtttgc actggtgcct gccggggccc gtcgacatgt ggaacggcgt 420

<210> 1156
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189119h11b1

<400> 1156

ctccctgatg gtcttatgag ggcctctgat gttatgatcg ctggcacggt tgctgaggtc 60

tgcggttatg gtgatgttgg caagggctgt gccgctgcac tcaagcaggc tggtgcccgt 120

gtgatcgtga cagagattga ccccatctgc gcccttcagg ccctgatgga gggcatccag 180

atcctcactt tggaggacgt tgtctctgat gctgacatct ttgtgaccac cactggaaac 240

aaggacatca tcatggttga ccacatgagg aagatgaaga acaacgccat tgtctgcaac 300

attggtcact ttgacaacga gatcgacatg aacgggctcg agacctaccc tggtgtcaag 360

cgcattacca tcaagcctca aactgaccgc tgggtcttcc ctgagaccaa cacttgcatc 420

attgt 425

<210> 1157
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a01b1

<400> 1157

ttaagtttaa gagcagtgtt tgccttttt gtgcttgtgt gtgatcgaac atactagact 60

gctattgagt ttctactact tgccacctgg tagtattaaa aatggttctg catataggag 120

tatagtcgta ctgcctatgg acttgagtct aacagggatg catatcgtcc gacaaagtaa 180

ggcaatgcga ttatgcactc ggtaaggatt cgagaaaccg gcagccattt ttcagttatg 240

aaaagacggc gcacagagtc ctcttccggt tgagaaaaaa aaaaaataag accagaatcc 300

atagacatta tactgagcca agctgttatc ttactgtttg aatgaaatga actacttttc 360

ccttttttcca taaaaaaaaa aaaaaaatat ggcttctttt ttgggggggcc cttt 414

<210> 1158
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a02b1

<400> 1158

ttatcgcctt ggctatcgca gtcccgattt ctgtatatca tcgcccgtgc catcgtctcg 60

tgaatggtag cagaatttgc acacgtttgt tctat 95

<210> 1159
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a03b1

<400> 1159

cggcccccag ctcaaggccc tgagggagtc caggaagttc gcgctcggcg gggccctggc 60

cggcgccgcg cacctcggag gcgttggctt caagtactcc aagagcccgc acggtgtcgt 120

gctggcgacc gggttcggag cgctcacagg cgccgggctc gggtcggagg tgggcgagca 180

ctggtacgag ctctacaaga tggacaagca gggggccaac ctcaggttca tctactggtg 240

ggaggacaag gtgtcacgcc agaagaactg aagaagactt ctgcataagc ttatgcctgt 300

ttcagcatac tggtttgaca agacaatgat gtctccagtt tgggatttct agtttttact 360

tcctaggctc tttccaataa ggagcatatt ggccatcaac tggacaatgg attttattct 420

ctctactatg ggctgctctc aggttctcta tgatgttcat gtttgcacct atcgaaaact 480

aa 482

<210> 1160
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a04b1

<400> 1160

ctaggatatt ggtcagcaat tgatcttttt tggatgttga tgaagctctt tcagaagctc 60

agaaatactg ctgcgtagtt tccttgtatc aatgggaaac tggggcttct gtttttgttt 120

ttggtttccc aacgttggat gaataatgtg tacctaaagt taatcaaaca aaatatgttc 180

cccttgcaaa ttatttaccc tttccctcct tgattgtttg tgaacaatgt gtgatgtttg 240

ctgtatctat tatggatttt tatatggata tacttaaaca aaaatgaaaa actttcaata 300

actgactttc aaggttgtca acagatat 328

<210> 1161
<211> 443

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a05b1

<400> 1161

cacctcttct tcttcttcca tagtaaccca acccaccctt tgcgaagatg tataacgctc 60

cgtcggggca ggagatgtcc tacacggagc acgtgcagaa gcgccacgag gagaagggct 120

gcatctacgc atgcgtgttc acagcgctgt gctgcttctg ctgctacgag acatgcgagt 180

gctgcctcga ctgcctctgc tgctgctgca actaaaccgg acatggccgc catggacgga 240

ggccgcaagg cgcagaggag atccaccggc ctccgccgcc tttcataata agcatatgtg 300

tctagtgtct tagctcgatg agaactgtat cacaactttg ctataatact atctgtcctt 360

gtaatcatcc atcatggttt gtgttgttgc tgctgctcta ccattttaat ttaattagca 420

tcagattatg gttctcacca aat 443

<210> 1162
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a06b1

<400> 1162

aactcccaaa ccgcaatggc aaaacgccta gccgaaaaag catcctgctg ctggtcctgc 60

tcgatgcggc gacccttta gagctccatg ggaagcacgg tgctggtagc gccgtaagag 120

atatgaaggg tgcgacgcaa gaccactggt tggcggcacc ttttgaaagc gggggtactg 180

gcaaaacctg gcgggacccc aacatagtgt attgggggg 219

<210> 1163
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a09b1

<400> 1163

gcttcgagcc agggcggttg gcggcagttt gcggggacga tggtcgggat cttctccagg 60

ttctcttccg gcgccggcca ccgccgcgcc aagaagtgcc gtggaggttg tggagacatt 120

ggcgcccaac atggagaccg gggagtctga cccggcagct gatcctggag atagcccgca 180

cggcattgag gtcggcatcg agttcaagcc ggtggagcac cctgtggagc ctgtcaacct 240

tgaccaacca gtgaaatgcc cgcttgctga gccatctata ctgcatgatg ggaggatatg 300

gcaagagagg atgtctacag cgggcgggag gccgaggacg gacctgccgg tcgtgaagga 360

aggattgcag ctcgagcccg acagcagcac cacaaggtcg aggtctgcgg taccgaggcg 420

cgccatactg ccctccgtga 440

<210> 1164
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a10b1

<400> 1164

aaaaacgggg aagacaaaaa gaaaaaaaaa cgcgtgccca catggctggg gcggcctaca 60

tggtggcacc cccggggctt tcccgggcgg cgcaccaccg agggccttga tggggcaacc 120

ttgaacgagc cgtacttaat ctg 143

<210> 1165
<211> 77
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a11b1

<400> 1165

aggggccgtc ttcgaggcgg gttgtggggg gaatgcagcc caaatcgggc ggtagactcc 60

gtccaaggct aaataca 77

<210> 1166
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120a12b1

<400> 1166

aatggaaacg cgggcgtcta gagagaagtg tccattggtg gcatggaacc tgtgttgcaa 60

agagataata acaaactagc tttgcttagt gggaggggct gtcttccatg ttatctgcct 120

atatgatttg acaaaactac tcgcaagttt atctgcc 157

<210> 1167
<211> 77
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b01b1

<400> 1167

gacacccccc ggggcggttc atgaagcgcg taggggggact ttgttacgcg ctggatgtcc 60

gttccacttg ccagggc 77

<210> 1168
<211> 211
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b02b1

<400> 1168

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acggctttac aacgaagcga ctgcgaaaac catggtgtta cccaagtaaa acatcttgct 120

gcacatacct gtttggtcag ctggcggaat agctaagagg gccgtaccga tcggccttcc 180

aaacagattg gcaaactgaa cggggaatgg t 211

<210> 1169
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b03b1

<400> 1169

gctagctacc ttgaggaaat ggccgttgcg acggcaatgg tcatcatgct ggcggcgctg 60

gcgatcctcg cgccgtccgc gcgggggctc gaccggaccg agttcccgcc cgggttcctc 120

ttcggcgccg ccacgtcttc ttaccagatc gagggcgcgt acctggagga cggcaagggc 180

ctcaacaact gggatgtctt cacccacacc cagtctaggg aaatcaacga tggacggaac 240

ggagacgtgg cggatgacca ctaccaccgt tacatggaag acgtggcgat catgcatgat 300

ctgggtgtaa actcctacag attctcgatc tcatgggcga gactcctacc aagaggccgg 360

ctaggaggcg ttaacacggg tgcaatagct ttctacgacc gcctgatcgc cgcgctcctt 420

gagaaaagga tagagccgtt cg 442

<210> 1170
<211> 496
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b04b1

<400> 1170

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taatgactgg tggatccatg tttgcgtttg ctgacgacaa cgataatgag tttttacggc 180

tgcacttgag ggtgatcgta tccatgctac cattctgcag tatcttgaga tttctacagt 240

ggagtagtac acaactacct atcacaagtt tgagcttaga tgaacaacat gggcaccatc 300

aaacggatag atcatgcgcc tgatgggtct catgatggag tagttgataa tggttatata 360

caaaacatat tttgacagag gtggcaccag acgtcacaga gaggtaccgc gttcggtcca 420

acgaggagct ccgggcatgg tgggcggtgg ccatggcatt ggcctcatgg gtttactctg 480

actgtcgccg ccattc 496

<210> 1171
<211> 150
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b05b1

<400> 1171

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gacgtcgtgg taggaggagc ggcggatctg gatggtgtgg tggccgcggt gcgcgtgcgc 120

gaggcacagc gagcagagcg ccgacgcgcc 150

<210> 1172
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b06b1

<400> 1172

aaaaaaatgg gaagggataa attataaaaa aaaaaacagc aatgacaaaa cgacataaac 60

aaagagctac tgatgatggt cctgctcgcg ttcaaagacg cctaagagct gaatgggaag 120

cacggcgctg gtagtgccgt cagcgagatg aaggctccgt tgcccgaccc cgggttgccg 180

gcaccggttg ccgcgggggt actgccaccg gttgtcggga cagcatcatc ggttatcggg 240

gggacctgat ccgtttcaaa agggtacact gcctcaagtt cagcactgtt aaattattgt 300

cccctctgca cagcaaatgg 320

<210> 1173
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120b07b1

<400> 1173

gtgggcttac aacagcggca ccttcgtttt tctgctcgcg ggcctggtga ccacctggtc 60

catcgcaaag acattgacct agagctcttt ctcaggcaac aacaatggtg gctttcatga 120

acccgggaag catatacaac tagaggaatt ttatttttt gctcgagtga cggtaatgcg 180

caacccagtg agacctgttg cagatttgtt cattggccgt ctcttattag gtgggtgatt 240

agcagtagtc gttagtgtca tactactcta gcttgtacca tagtatatgc tatttttcac 300

cgtgtggtca actcctatct ggtttgctgg tgtacgctgt gtagctatgg gtattgtatt 360

tggagggcag atctcatttg ttcattctca agggtgtttt ggtagctgcc atgattggtc 420

tgtgtaatgg ctttggcttg ccaatggaaa atgcatacat tcacttgtat acgcaagttc 480

tgtt 484

<210> 1174
<211> 378
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120b08b1

<400> 1174

tgggacctca ccgcgcgcgt cttctctcgt ttgccagaac gtgagcctcg acctgggcag 60

gttcggcgac accctccgga ggctgcactt ccgggggcgg cgcacgttcg tacgtgacag 120

ggcgctggat cgatcgcaac cattttgttg gactcttgtt cgacagcaca gaccacacaa 180

tgtgttttgt ttatttgttt tgttttgttt gtgcacaaaa gaccatatat aatccgtcga 240

atactctgat gacgnaaaaa aaaaaaaata taaaattaat ataaaaagaa taaatttaaa 300

gaatataaaa aggagaaatt atctaacatt tgcaatattt ttttataata aaaaattggg 360

gggcggccgt tttaaagg 378

<210> 1175
<211> 410
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120b09b1

<400> 1175

ctgggaggtg gcctgggcaa ggtttagagt tttaagaggc ccctcgaggt ttcccgccag 60

gaaaccggag gcgggctcgt cggtcaccgc cgttacaagc gcgagcggct gcatgtaaat 120

ctgtacatca ttacatgagc tctgactgcc tctgctgttg ttgctgcccg tgattctgga 180

gctagtaaat atggctagtt tgcccgtgga atggtaggtt tcgatgcgct gcctcgacaa 240

aaaataggtt cggtcgggcg cacctggaac atgaggagga tttgtggtga acgcgagctg 300

tttgcaatgg tgtggaatgt caacaccgga ggcgtngtat aagtgtaacc catacctcac 360

atgacctcac atgagaacga aaaataatgg agcatgttct gcaagcctgg 410

<210> 1176
<211> 345
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120b10b1

<400> 1176

ctatcgcaga ggttcatgtt cgaggagggt tgatactacc actgctgttg ctcgatcccc 60

ttgcccgagg tggctcagac ggagtgagct ccgtgtgttt caacataatg cagtattcag 120

tcttgacgca gtatcttatg ccctcgggat cagtacgtgg tcttgtttgc cctcatggaa 180

tttgtagttt tggccggatg tctttgctcg tgttgctgtg gacattgtgc acggtaatga 240

gtggtagcat ccctagccac gggttgtatt ggcttagtgc ccctgttgat ttctgaatct 300

gaactgttgg ttgccacttt gcttcatctt ctctctatcc gnttt 345

<210> 1177
<211> 274
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120b11b1

<400> 1177

cttgttctgc agtgcccctc aagcgatggt tcgaaagaca gtacctgtag attcatgtat 60

caacattgtc cctgtataac caaagtaaac agctgtcaag atgatgatat gtatttcaca 120

aaanacaaaa aatgagacca aaaaagaaaa aaaaaaagct aaaaacataa ataaaactgg 180

ggggtccgct ttcgaggatc ccagtttccg tcctcgagcg tgccacgtca tatcttttct 240

tttgtgtggc ctacttagat tttacttgcc gggg 274

<210> 1178
<211> 485
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120b12b1

<400> 1178

aactaccatt gggccaacat tcccaacaac cattctttca gcctcaggaa ccccaacaac 60

catttcccca gtcacaacaa ccacaacaac cttttcccca gccccaacaa caatttccgc 120

agccccaaca accacaacaa tcattccccc aacaacaaca accggcgatt cagtcatttc 180

tacaacaaca gatgaacccc tgcaagaatt tcctcttgca gcaatgcaac catgtgtcat 240

tggtgtcatc tctcgtgtca ataattttgc cacgaagtga ttgccaggtg atgcagcaac 300

aatgttgcca acaactagca caaattcctc aacagctcca gtgcgcagcc atccacagcg 360

tcgcgcattc catcatcatg caacaagaac aacaacaagg cgtgccgatc ctgcggncac 420

tatttcagct cgcccagggt ctgggtatca tccaacctca acaaccagct caattggagg 480

ggatc 485

<210> 1179
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120c02b1

<400> 1179

gcaagatggc cggaaggaag ggcggcgaca ggaagaaggc ggtgacccgc tccgtgaagg 60

cccggcctcc agttccccgt cggccgcatc gggcgtttcc ttaagaaggg ccgctacgcc 120

cagcgtgttc ggctccggcg ccccccgtct acctcgccgg cgtccttgag gtacctcgct 180

gccgaggtcc tggagctcgc cggcaacgcg gccaaggaca acaagaagac ccgcatcatc 240

ccgcgccacc tgctgtttgc cgtccgcaac gaccag 276

<210> 1180
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120c04b1

<400> 1180

ctcatccctg gcacaagctt tttggtaatg tcgtatgcca cctgaagcag ttgatcttgt 60

gtcaaggcta cttcagtact caccaaatct gcgcttcaca gctgtcgatg cttgtgccca 120

tccgttcttc gatgaactgc gggatcccaa gacctgcttg ccaaatggac ggccattacc 180

accattattc aacttctcgg gagctgagct agaaggcctc cctgttgagc tactccaccg 240

gatcattcct gaacatatga ggaagtgaag agagatggcg gctggagaag cggtcgctat 300

ttctcggcgc cactgtgcgg gtggagaccg gacaccgcga gcatatccat ggctcgtcgt 360

ggatttgatc tggagtagac tccccggctg gcctggactg gcctggagct agagaagggc 420

aaccgcgggc atgtgcccag ggcccagacc cacccacact g 461

<210> 1181
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189120c06b1

<400> 1181

ctgcggctac tccatgaacg ccttcaactt atctgccttc tccaccatcc atgtgacccc 60

cgaggacggc ttcagttacg cgagctacga aggcattggg catggacgct tcggccctgg 120

cctatggcga catcgtcaag agggtcctcc ggtgctttgg cccttcagag ttctcagtgg 180

cggtcaccat cttcggtggc cgcggccatg ccgccacctg gggcaagaag ctcgacgccg 240

aggcatacga ctgcaacaac gttgtggagc aggagctccc ctgtggaggc gtcctcatct 300

accagagctt tgccgcgaac gaagaggttg ctgtctctgc cgggtcgccc aggtccgtct 360

ttcactgctt cgaggccgag actgtggaga gccacccgct ggtcaaggaa ggcaagctcg 420

ccaacctcct cgcatggcga gcggaggat 449

<210> 1182
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189120c09b1

<400> 1182

aaggacggcg ggtgcgacca gttacttttc cgacgggaag cttgtgaccg agttctccgc 60

gcccaactac tgcggcaagt gtggcaacga cgggagccgt catgaccgtc gccggtgacc 120

tcgcctgctc cttccgcgtc ctccaccctg atgatactgc cgctcctcct ccggctccta 180

tttatctgta gtccaacata tatatatatt cattttagtt tcagacgcct tgccatggag 240

tagtaatctc cagctcgtcg tgtcttcggt ttattaagag tgaatttcag tttttgaatg 300

tattgcaggt ttttgtccca tttagctaaa gttttactac cagatttatt ttaccacatt 360

t 361

<210> 1183

<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120c11b1

<400> 1183

tgtgttatgg tatcgccctc tttataaggc gatgtgaact gagagtgctt tgaagtttgg 60

gtggtttttc ctattttaca tgattcacat aatcttctgc gtgtggtcag ctgtgtctcc 120

cccattccct ttcaaaggaa attctttgac tgggattttg cctgccattg atgtcataac 180

caagagcctt attgttggga tattttactt tgttggattt ggattgttct gccttgaatc 240

actgctgagc ataggtgtca ttcagcaagt gtacatgtac ttccgtggaa gtggaaaatc 300

ccaggagttg aaacaacagg cagcacgtgg tgccctgagc tctgcgttct gatgaagaaa 360

accagcagcc agagttgtag ccagggtagt gagtggaagg agacaggatg tgtgccgatt 420

ggaaatggta gtcttgcgca tcgctgcacc atgcggattt ggatcgctga aatcatacag 480

ctatatcttt ttgctcttct gttaatacaa atat 514

<210> 1184
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120c12b1

<400> 1184

tcgccataag caatagaacc ttttttgttt taccattttc tgacgaggaa ttgtactacc 60

atgtgatgca taatttgatc gtcctgtgat caaaagacat catatataag tttaataata 120

ttttcatgaa cagtttaccc tttt 144

<210> 1185
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d01b1

<400> 1185

gcatcctctc agtccttagc tttcttccct cgccgccacc caccaaggaa aggaggatgt 60

cttgctgcgg cggcaactgc gggtgcggcg cctgctgcaa gtgcggcaac ggctgcggcg 120

ggtgcaagat gttccccgac gtggaggcca ccgccggcgc cgccgccatg gtcatgccca 180

ccgcctccca caaggggagc tccggcgggt tcgagacggc cggggagacc ggcggctgcg 240

actgcaccac ctgcaagtgc ggcaccgcgt gcggctgctc ctgctgcagc tgcaactgag 300

ccggcgccca ggaggccggc cggcagaggc gagcacgagg atgaggagga caagcaagca 360

agcaccatca ccaccagttt accaccaccc agc 393

<210> 1186
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d02b1

<400> 1186

acgtgaggtg ataagaatat cctgatgata ttaggtcgca ctcgcaccac caccgatcag 60

aagccaccac gccaacgctg tgccgccgcc gaacttttgg agaggagacg cggaggacgg 120

caagatggga ttcgagaagg agatcctgaa agccggcacc ggccccaagc ccgtcaaggg 180

ccagaaggtc accgtccact gcaccggcta cgggaaggac ggtgatctgt ctaagaagtt 240

ttggagtacc aaggaccctg ggcagcagcc attctctttc aacattggtc tcggttcagt 300

aatcaaagga tgggatgagg gagtcatggg catgcaattg ggtgaagtcg cccgtcttac 360

gtgcacccca gactacgctt atggat 386

<210> 1187
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d03b1

<400> 1187

caagatcaaa agcattatct ttgtttttcg cattggtgtc tccaaaacta cgaacaaccc 60

aagtttcctt tgaatcagca cttgaacaaa ttgtggagct agcgaattca agatcaacca 120

tgctctctag cttctcacag ataaagcgca gatcatgaat cgattgcctg atttgaggtt 180

ctgtaccctt gcacaccatc tattctcttt gtggagtatc agttatatgc aatcgacagc 240

gctcgtagaa aatatcataa tcctatttga aatgttgatg cacgtggaga tgtatgagag 300

ttgtgttttg cgtttcatta tcttgctgtt gaggcaagca ctatgtctgc atattgacgg 360

tttcctttgg ggaaatcaac ggggaaactt gttcttctga aaaa 404

<210> 1188
<211> 494
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120d04b1

<400> 1188

gaaggacaag gaacacgcca aagaggccta accggcgaag gaaaagaagg acaagaagga 60

gaagaaagaa aagagcaagg agaagaaaga agaaggtcgg agaggtaact gacacggcca 120

agctgagggc aaagctagag aagatcgatg tgaaaatcga tgacctgaag gcgaagaagc 180

aggagattgt ggctcgactc ctcgagctcg agggtaaggc agcagaggct gcagcaccag 240

cgagcggctg aggtttcgac aggttgttgc cttgagaaga atgaaacagc tttcaggcaa 300

tgcatgcagc tagtgacatc ttattattgt tctttcgatt ggcatattat tgtgctttaa 360

tcttcctgga gctacatatt tgcatccagc attgcatgat catctagatt tggtgcacac 420

aagtgtccac cttgtatcga atcccggggt aactgtggca tgaatgtacc tcttaaagat 480

ccacntttaa ttaa 494

<210> 1189
<211> 565
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120d05b1

<400> 1189

acacacggac acacgtgcaa gttcgagttc gtgagccatg gcgggcatgg ggaagcagca 60

ggtggtggcg gcgctgatgc tggcgctggt ggggctggcg gcggcgccgg gcggggcgca 120

cgcggcgtgc caggcatcgc agctggcggt gtgcgcgtcg gcgatcctga gcggggccaa 180

gccgagcggc gagtgctgcg gcaacctgag ggcgcagcag gggtgcttct gccagtacgc 240

caaggacccc acctacgggc agtacatcct gagtccccac gcgcgcgaca ccctccagtc 300

ctgcggcctc gccgtccccc actgctaggc gccggcaggc ccctggcgca tatggcaagc 360

tagctgcctc agtgaccatg agagcgtcag actatagcta gccctagctg agtgcgtgtt 420

gcgttcatga acgcatcttc ctgtcaacca tgtggttcga ctttgatgat gctggaataa 480

aaatataaaa tgttgggtga tgatctaccg cggncatgtt gcttctggct gctgctgctg 540

gtaataaaat ataggtgcaa ctttg 565

<210> 1190
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d06b1

<400> 1190

aggccctcgg ccgggcgaac gttatctttc tggacgctca agaacgtgac cccggcgctg 60

cacccggaga tgatcctggc ggcgaccaac aacggcgaca tcgtggacgc ctaagcaaag 120

caatgaacca cggacaccaa ggcgtacgta cgctggtgtt tcggggcgaa aaatcaataa 180

gatggttcgg tgaaacagag gatgcttagg gacgaggtct tgtctttgtg atttgtcaga 240

ctcgtgttta attccgatgt ttatctttag ttttcttgtg ttagcgtatt ttgttcatgc 300

cacctgcccg ccatgtgctc tgctctgctc tgcctcacgg cagcttcatg gatgatgaat 360

ccttatggaa caagaggagg gaataaaaag gttgagttct ttataaaaa 409

<210> 1191
<211> 548
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d07b1

<400> 1191

cccccaaccc acaaccacct gcggttgcgc agcgcagctc gaggaaggag gcgaagatgg 60

tgaagttcct gaagcccggc aaggcggtga tcctgctgca gggcaggtac gccgggaaga 120

aggcggcgat cgtgcgcgtg ttcgaggagg gcacccgcga ccgcccctac gggcactgcc 180

tcgtcgccgg cctggccaag tacccgaaga aggtgatccg caaggactcg gccaagaaga 240

cggccaagaa gtcgcgcgtc aaggtgttcc tcaagctcgt caacttcacc cacctcatgc 300

ccacccgcta caccctcgac gtcgacctca aggaggtggc ctccggggcg cccgactccc 360

tcacctccaa ggacaagaag gtgggcgccg ccaaggccgc caaggccaag ctcgaggaga 420

ggttcaagac cggcaagaac aggtggttct ttaccaagct ccgcttttag gcctgcaggc 480

cgaccgcgca gggcgtttct ctgtcgtact accttgaccc gttacatttt agctgcttgc 540

tcttggat 548

<210> 1192
<211> 542
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120d09b1

<400> 1192

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gtgggtttgt tgcatccaac tctaaggatg accctgccaa ggaggcagcc aacttcacct 120

ctcaggtcat catcatgaac caccctggtc agatcggcaa cggctacgcc ccagtgctgg 180

actgccacac ctcccacatt gctgtcaagt ttgctgagct ggtgaccaag attgacaggc 240

gatctggtaa ggagattgag gctgcgccca agttcctgaa gaacggtgac gctggtattg 300

tgaagatgat tcccaccaag cccatggttg tggagacctt cgccacctac ccacctcttg 360

gccgcttcgc tgtgcgtgac atgagacaaa cggttgctgt tggtgtcatc aagggcgttg 420

agaagaagga ccccaccggc gccaaggtta ccaaggctgc catcaagaag aaatgagtgc 480

tctggtgtct gccatcgagt tatctagcag aagttttagt gtcaagtctt ttttggagaa 540

tc 542

<210> 1193
<211> 365
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120d12b1

<400> 1193

cccgccggtc tacggggtgt tctactcgtc gtcggcgcct ccaatgccgc tggtctacgg 60

ggtgtcgtac gggtcgccgc cgccaccgac ggggccgtag aaatagctgc tagctaggta 120

gcaccactag ctagccgcgc cgcaggctga tctatcggcc cggccgccac ctccacggcc 180

ggatcgctcg tcgtcagcca gccagccagt ccgtccgtcc gttcgtccgt ccgtccgtgg 240

ctcgtccgtc accagtacat ctctgcctgt agtttcttgc tctcctcctc tccttgaacg 300

ttatttttg ttctctgttg tccatttgtt atgtcgctat ttgatccgaa ttaaattctt 360

nccac 365

<210> 1194
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e01b1

<400> 1194

ggcaagcacg tggtcttcgg ggaggtcttc gagggcatgg acgtcgtcaa gaacatcgag 60

aaggtgggct cccgcagcgg cacctgctcc aagcaagtcg tcatcgccga ctgcggccag 120

ctctagatcc gtccgcccgc cggtcgcctg tcgtcgtcgc cccgtgtccc gtgtcgtcga 180

tctaaataag agagtcgtgt gtcgtgtcgt gtcttcccct tgtccgtccg atgagatctc 240

cgtggttggt ttaggagggt tttaggtgga ctcttttggc cgctggatct gtgtccggcg 300

gccatggtta tcttcctgtg tctgctgcta tcttactgtt tgaatgagat gaactccgct 360

atgaattatc cat 373

<210> 1195
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e02b1

<400> 1195

tggatgagac gtgctggagc gactatgttt tctgcaagga gactggcaac atgtactgct 60

gctcgaagat aatggcggag atcacggcga aggaggaggc ggccaacagg gggctggacc 120

tggcagtggt ggtgccgtcg atgacgatcg gccccgcgct gcagcagaag ctcaatctgg 180

gcatcgcctt tatcaaccgc tacctcacgg gcgccaagaa gacctgcccc aacgccgtgg 240

ccggctacac cgacgtccgc gacgtcgccc gcgcccacgt cgtcgtctac gagcgcccgg 300

acgcacgcgg caggtacctc tgcatgggcg ccgtgctgca ccgtgcccat ttcctccagc 360

tgctccgaga ccttttcccg cagtacccca tcaccgacaa gcgtgaagat gacggcaagc 420

cgatggccaa gccgtacagg ttctccacca gaggctgagg gacctcgggt tggagttcac 480

tcccctcaag agagtttgta cgacatg 507

<210> 1196
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e03b1

<400> 1196

tagcttcagc tagccaccct cttccacttc gggcattttc ttgcatccac gacggcaatg 60

gccaccgctg atgtccagaa cccgacggcc gcgctgacgg aggaggcgcc cgcggtggag 120

acgcccgtcg ccgccgagga ggccacgaag acggaggagg tccccgcgcc ggcggaggcc 180

gaggtcgagg cgcttgtccc cgtcgaggtt gaggagacca aggaggaggc gccggcagcc 240

gctgagacgg aggagaccaa ggagcccgag ccagcagctg ccgccgagcc ggaggccgag 300

gcgcccaaag agccagaggc gccagccgtc gtcgaggcag agaccaagga ggccgtggct 360

gaggcagagc cggcagtcgt ccaggaggtg aaagaag 397

<210> 1197
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e05b1

<400> 1197

gccagcgaga aagaggagag ggttggccgt ttgaagcact tcgccgataa aatcgaacag 60

gttgatgttg agaatttcgt agaagacgtc gatggcggcg atgaagatgg caaagatgtt 120

aaactgaatg caagtgctgg tgtgaagaga ggcaggccac tgaaggagag ccccaacatc 180

gtcctggaag agaacagcaa ttccagcgtt cgatcaagca gcgatgaatc ggccaggacc 240

aatggattca ggcagattgg gaaccggagg aagagcacgc cacggcgagc agcggaagcg 300

ggcctagaat gcaagtgatc gctgagcaat gccatgccaa tccatacaat ttttggcacc 360

aggtagcctt cataattttg tttaaatgta aacatgacat gcactgagtg ctgaaattc 419

<210> 1198
<211> 248
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e06b1

<400> 1198

acacaacatc tcctgggtag ggattttata agaactccca gttagcaatg gcgaagcgcc 60

tcgccgtcgc gctcctgctg ctggtcctgc tcgcgtccag cgacgcggga gagctgaatg 120

ggaagcacgg tgctggtagt gccgtcggcg agatgaaggc tccgttgccc gaccccgggt 180

tgccggcacc ggttgtcgcg ggggtactgc caccggttgt cgggacagca tcatcggtta 240

tcgggggg 248

<210> 1199
<211> 407
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120e07b1

<400> 1199

cccctcgcgc cccagccgac gccgccgttt tcgtcgccgc cgccgactgc agcaatgtcg 60

ctgatcgcgg gcgaggagtt ccagcacatc ctgcgtgtgc tcaacaccaa cgtcgacggt 120

aagcagaaga tcatgttcgc gctcacctcc atcaagggtg tgggccgccg cttctccaac 180

atcgtctgca agaaggccga catcgacatg aacaagaggg ccggagagct ttccgcggag 240

gagatggacc gcctgatggc ggtggtgcac aacccgcgcc agttcaaggt gccggactgg 300

ttcctcaaca gaaagaagga ctacaaggac gggaggttct cccaggtcgt gtccaacgcc 360

gtggacatga agctcangga tgaccttgag aggctcaaga agatcag 407

<210> 1200
<211> 392
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120e08b1

<400> 1200

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tttgttgaaa ggctacatcc cgcctgcatg ccccatgnaa ccttttttgtg aagcaatata 120

gcaaattgca gttcgatcgt gaagctgagg aaggattcca agagaagaga atgaggctgg 180

gcgggatagt tctccgatac aattaccctt tggaggagca tgcaagtaaa gtctataccc 240

ggacaatgta cgagatgttt ggccaggctt tgtatcggtc tggtaggtat gatgttgagg 300

aagttgagcg gggcataacc taccacgtgc gacatgttga agctgaaaag cgagagaagt 360

ggtgccgtga aatgcatgtg gttagtgtgc at 392

<210> 1201
<211> 436
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120e09b1

<400> 1201

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aaaccggagg cgggctcgtc ggtcaccgcc gtaacaagcg cgagcggctg catgtaaatc 120

tgtacatcat tacatgagct ctgactgcct ctgctgttgt tgctgcccgt gattctggag 180

ctagtaaata tggctagttt gcccgtggaa tggtaggttt cgatgcgctg cctcgacaaa 240

aaataggttc ggtcgggcgc acctggaaca tgaggaggat ttgtggtgaa cgcgagctgc 300

ttgcaatggt gtggaatgtc aacaccggag gcgtngtata agtgtaaccc ataccttaca 360

tgaccttaca tgagacgaaa aataatggac catgttctga aagcctggaa aaaaaaaata 420

aaaggggcgg ccgttt 436

<210> 1202
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e10b1

<400> 1202

ctcagcccgg ggaggatccc gggcctcctg cgccgtcccg ccgcgtccgc cggcggcgcc 60

gtcgcgggcg tccagctgac tgtgtcggac tccgagctgt cgtcccgggg cttcgcggtg 120

cggcgcaccg cggagggcct tgacgtggcg gcgctgaacg aggtgttcgc gcgcgtgggg 180

ttccctcggc ggcaggagga gcggctccgg cgcgcgctgg agcacaacga ggtggcgtgg 240

ctggcgtctg aggcgacagg gcgccccgtg gcgttcgcgc gcgcggccgg cgacggggtg 300

ttcaacgcgg tggtgtggga cgtggtggtg gag 333

<210> 1203
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e11b1

<400> 1203

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ccatatcatc atcgagtgac gtcactaccg gaatgggcgg ctactgagaa gatgagagct 120

ctagtatccg aaaaatggac caccaatgtt tagtcaatgg tccgatccat atgtagcggt 180

gaaaaataaa gtgccatgca ttatcatgtg tggactagac tggcactagt tcaaacttgg 240

gaataaaagg caaactaagt tattttctgc tgaacgaatt catcgaccgg gcgttccctc 300

ccaaccaaag ccaaggcggt ggtcccccga aaacgacgct ggcacctagg tgcccgacgg 360

cggtg 365

<210> 1204
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120e12b1

<400> 1204

tgaaaaccac cactagtttg tgcccatggt taccttctcc aacgaggagc ttctgcaggc 60

gcacaccgag ctctaggacc tcaccttcca tgtatgacgc actgatgttt actaaatagg 120

ctggaatttt tt 132

<210> 1205
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f01b1

<400> 1205

atctctctct ctctctctct ctggtctctt ctttatcttt atcggtctct ccatctccct 60

gtggagggat ggatcatact gctctgcgtt tcagttggag attaaacgga tatttggggc 120

ttctctctat tgcatgcatg ctgacgttct cgtgcatggg acatcttagc tattatatcg 180

aggcatctag agctgatatc ctgtccgaac ttttacaagc actgcgtgct taataacctt 240

gacgttaccc aagtttatag gggctggcta catccacttt tatctggtgt cgtaatatat 300

agggggcacg taccagatcg cgttcccaac a 331

<210> 1206
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f03b1

<400> 1206

gaaagagacg atgcaactgc tggaatgttt gtttaccacc gccaaattgg tcctggaatg 60

tatcaacaaa tgaccgagca ggtctgcgac cagtgtccaa atgttaagta tgtacgagaa 120

ggtgactttt taactgttga tattgagaag ggtatgcaag atggacagga ggtttcattt 180

ttcgaggaag gagagcctaa gattgatgga gaacctggag acttgaagtt caggattagg 240

acagcaccac atgaccgctt cagaagagaa ggcaatgacc tgcatgcaac agttacaatc 300

tccctgctcc aagctctggt tggatttgag aagaacctca agcatcttga caaccatctt 360

gtccaaatcg gctcccaagg tgtcactaag cccaaggagg taaggaaatt caaaggagag 420

ggcatgccat tgcaccaaag caacaagaaa ggcgatctgt atgtgacgtt cga 473

<210> 1207
<211> 408
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f04b1

<400> 1207

gtgtcaaagc ttgaattcga tccactttat ttccttccat gaacgtactg tatacacgta 60

tacaatgcag ccacacgtgg tagctttttt ttcaacagca tgggtcagtc tcagtgctca 120

ctcgtagcta gcccgcttct agctagcctt ttattcttat catagcttgc ttacccttc 180

atttcatcta gtcgcggcag tcgaccaact ggtagttgac gttgaggtgg ccctgctggt 240

acccgacccc gatggtgtcg atcttggtga agacggtgtc ccattccagg ttcagcccgc 300

cgttggcgca ctggttcacg atcctcgtcg tcacctgcgc ccccgttgcc gggttcttta 360

cccggaggga cttgccgcac gctccctgcc cgtgggcgcc ggcggggc 408

<210> 1208
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f05b1

<400> 1208

caggaagctc ttgagttatt tggatgtgtt ctcttccggg aagcaactgt cgatctgaca 60

gccagcaaca ttacagtgaa cagaggatcc aagatccatt gcattttaga tacacccatc 120

cgattagatt tgagaacacc gtgtaacctt ctgcatcgct tgcagtcgat tctacttgtt 180

ttcgtgtaat ttgtcatgta gaaacaaaca ctagttcttc tgttccgtag agagagtgca 240

ttggagggca aggagttgtt tgtctgtact acctgatctg gggggaaatc tatattatca 300

caatttttg ctgtttccaa aaaaaaaaaa aataaaaata tatttaatat aaaaaatta 359

<210> 1209
<211> 438
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120f06b1

<400> 1209

gataatacaa ataccatggg ccccgctttg atggcttcgt cggctaccac cgncgcaccc 60

ttccaggggc tcaagtccac agccggcctg cccgtcagcc cgccgctcca gcggcagcct 120

cggcagcgtc agcaacggcg gaaggatcag gtgcatgcag gtgtggccaa ttgagggcat 180

caagaagttc gagaccctgt cttacttgcc acccctctcc acggaagccc tcctgaagca 240

ggtcgactac ctgatccgct ccaagtgggt gccctgcctc gagttcagca aggttggctt 300

cgtcttccgt gagcacaaca gctcccccgg gtactacgac ggtcgatact ggacaatgtg 360

gaagctgcct atgttcgggt gcaccgacgc cacacaggtg ctcaacgagg tggaggaggt 420

caagaaggag taccctga 438

<210> 1210
<211> 167
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120f09b1

<400> 1210

aaggagcatc tctagcttaa actggacatt ttatcagtcg tctgtgagat aagtttatcg 60

ncgngtcgtt tagcgtttag ctgtgctcct tccagatcga agtcgttgtc tgtctgtgta 120

atgtttacct ggtactgatt cagtcatttg gacatggtgt ttatgtt 167

<210> 1211
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f10b1

<400> 1211

ggatttggta acgagaaatc gttgggattt taggtgctta ataattgtc ggattatagt 60

gttcgtcgta ttattatgct ttgcaacaag ccatctgatg attattatgc tgttg 115

<210> 1212
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f11b1

<400> 1212

ttccggccgc ggccgtgggc tctacaggct ccgcttctgc cgggacatct agactgggac 60

cgtcgaccgg gggccgccgc ttgcttgctt gcttgcggct tactgcttgg tcttgtgtcc 120

tggttaatct agcttcttga tctgtattga ccttcccttc ccttccatgg gttctcgatc 180

tttttcctct gctaccgccg ctgtatgtac gctgcttggg gctctgaggt gtactccatt 240

cctccccgtg tatccggtcg atccgcatgt agatgggtga tacctctggg gtatgtgaat 300

gaacagagct gtttcgttcg aaaaaaaaaa aaattaaaaa aaaaaaaaaa aaaaaaaaat 360

aaaataaaaa aaataaaaaa tttttt 386

<210> 1213
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120f12b1

<400> 1213

aaaaaaaaaa ggaaaaattt aaagggaaaa attaaaaaaa aaaaaaggaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaataata aaataaa 97

<210> 1214
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g02b1

<400> 1214

cgttaattgt gaaacaatac agatatttat ttacatgtgg agtacttacc tatcagcgcc 60

cttgctaaac agtaatatcc tccccctctgg ctctggttcc ttcacttatt acagacatcc 120

gtcttcgtga gctactgaat tccaagacat ttaggagctc atattttctg taagaggatg 180

ctaaaggtca aatttacgta ataaacaata tcctttaatg 220

<210> 1215
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g03b1

<400> 1215

ggaggactcc ttcgcctggg aggagctttt cccaggtata tacccccaa caatggcttg 60

atgctagcca ctgccggcat gcagctcgtg ctgcgcttta cctctcaggt tcaccggcgg 120

cgacggcggt gcgcggcgga ggtatctagc tagctaggcg ggtgttaggc cgtgtagggc 180

aactatacat ctttggcaat gtcttcttct tcctcctcca tgggaggatt gtaatggagt 240

gtgtaaactg tgcgtgcatc ccctgggctg ggctctcgtt cgtggaaact caccgtcttg 300

catttctacg accaatactg gtgctctgtt gcctcgttga aaagaaatac tatactagtg 360

ctcttgttgt ggaggct 377

<210> 1216
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g05b1

<400> 1216

acctctgcga ccgcgatagc tagagtggaa gagtagatcg acgggcatgg cgatatgagg 60

aaggaggtcc tcctggcggc catgatgctg gcgctggtgg tggcggcgcc gggcggggcg 120

cgtgccgcgt gcgtggtggg gcagctgacg gtgtgcatgc cggcgatcac caccggtgcc 180

aagccgagcg gcgcgtgctg cgccaacctg cgcgcgcagc aggcgtgctt ctgccagtac 240

gccaaggacc cctccctcgg cgcctacatc cgcagccccc acgcgcgcga gaccctcgtc 300

acctgcggcc tcgccgtccc gcacagctag gcgccaggcc gcctagcgag tatgtatggc 360

tcagctatag ctgcctccgc cgtccatcag atgagagatg agactatagc tagcctagct 420

ggtgagtgcg cgatgcgttc atgccgcatg catccatgtt cctgttcgat ggatgatgat 480

ggaataaaat aaaagatgtt ggggatgatg ctggataaaa tgaccgactt gtgt 534

<210> 1217
<211> 471
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120g07b1

<400> 1217

cctccccatc cccggccaag cgttagactt acaccgactc cgaggtctct cccctcgacc 60

cacccgccaa ggccgcccgc cccggcgccg acgaggaggg ccgccgccga ggccaaggcc 120

cgggtcgcgg acaaggggaa ggggaagatg gtggtcgatg aggaggaaga aggcgacgag 180

gaaagcgacg aggaggagga tgacgaggag gtcgagggag atggcgacga gagtgacggc 240

ttatgcgagg atcccctctc ggaggtcgac ctcaacaaca tcctgccctc tcggacccgc 300

cgctgcgccc cagcacagcc tgtggcgtac ctggtgccac cagaggaggc agcggaggat 360

gacgaggacg atgaggacgc atacgtcgac atggctcccg gggaggagag cggctacngg 420

gaggagagcg attagggtcg caactggact aactcgctgg caatccttcg t 471

<210> 1218
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g08b1

<400> 1218

tcctctcagg tccaacgcgc gcaactcgtc agaaatggag acgacttccg ataccccacg 60

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cccggcggcg cagggccacc tcaaccccat gctgcagctc ggccgtcgcc tcgcctacca 180

cggcctccgc cccacgctag tcaccacgcg ccacctcctc gccaccgtcc cgcccccttt 240

gccccccttc cgcgtcgccg ccatctccga cggtttcgat gaaggcggca tggctgcgtg 300

cccggacttc cgggagtacg ggcgccggct 330

<210> 1219
<211> 447
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120g09b1

<400> 1219

cacactgcgc gagagccgac gccggtctta gtctgagaga agagggcaag aggccatggc 60

gagcgagcgc aatggcgacg gcggcaagga gcgcgccggg ggagaacggc aacggcggcg 120

gcggcggagt gtccttggag atgccggaga tcaggtacac caggctcttc atcaacgggg 180

ccttcgtcga cgccgtctcc ggtaagacat tcgagacgag ggatccgcgc accggggacg 240

tgatcgccag catcgctgaa ggcgacaagg aggatgtgga cctggcggtc aaagcggcaa 300

gagaagcctt cgatcatggc aaatggcctc gcatgcccgg atccgaaagg gggcggatca 360

tgatgaagta cgcggacctg gtggagcagc acgcggagga gctgaccctg ctggagagcc 420

tggacngccg caagccgcgc atggcga 447

<210> 1220
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g10b1

<400> 1220

tctgttgttt ggcatctcat ttagttggtg aacagaagcc tgcctgtcta cttagtttaa 60

cagctgtagc tttgttgcca gataaaatgg tgaactttgc gtatctctgt tttggtttgg 120

catgctgaga gtattcatgc agcatcacat aacaatgttt agggcgttac ctctgattta 180

tgtgcgttgt tttc 194

<210> 1221
<211> 575
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g11b1

<400> 1221

gaacctggat tcccgcgaac tctggaagcg tgtcatgcaa ggccatgccg gtgctaactt 60

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cagcaccata aaattctacg ggaactcatt catcgcaggg ccaactggag aaatcgtgaa 180

gcttgcaaat gacaaagacg aggaggtgct cgtggcagag tttgacttgg acgagatcaa 240

atctacgaga cacggctggg ggatattcag ggacaggcgt cctgatctat acaaagtgct 300

actgacgttg gatggcaaga catcatcatc atcctaggtt ccacttttat gaagacgaca 360

tgaactccag aatgctatac tgggaaaaca cagggtccgt aagtctagct tccccctgca 420

aaagaaatgg tttgcctctt tgcaacgtat ccccgtgttt gcgactcggt gattttccac 480

caatagagca ttaataaaat actgtcatgt aagagaaata ttgctcctac aagtatgaag 540

attagggatc aaagcaatat aataatgatg catcg 575

<210> 1222
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120g12b1

<400> 1222

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tacggaggcg gcggcggtgg cggctacggc ggcagccgcg gcggctccgg cggcggcaac 120

tggagggagt gaatggtggg gcccctagct ggccagttat cctagttacc gatccctttt 180

tttacctgtc taccaaagtg ttatcgctcg ctcccgagta ccctagatct cgctccatcg 240

cgtaggttcc gagatgttct ggctaccgtt agatgtgacg ccgctaccgt tccgtgttac 300

ttgttaccgt ccctgttccg ttcgctatga atgaaatgaa aaatcagagc aaaagtttgt 360

tcgc 364

<210> 1223
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120h01b1

<400> 1223

ggcttcgtat atcaatttca tgcaactacc ttctccggtc ccgatccagc ctcagcttca 60

cctgaggccg gccctaaatt tgtttgatca attcttttgc tactagtagt aactagtgat 120

gatcactgtt gcatcattta tttatttatt ttatatatca tcacaagttt cctgtgattc 180

ttttctttct atacctttt gtcgatcgtc ggctccagct cgatcgaacg atccatgctg 240

ctaattgttt gtgtacgggt gattaagtaa cttgtgcact tgtgcttaca gttaaaaaaa 300

atagagatta ggaaaaccct taagttaccc aacttaattt gctatgacaa aaatgccaat 360

tttgccagat agcataaatc ccaaagaggt ccccgactta tacttttccc aacaatatcc 420

taactaaggg gggccctttt taaaggatcc aatcttttt 460

<210> 1224
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120h02b1

<400> 1224

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cccaattcgc tcgggtgttg gaggcactga cagcacaagc agcttccatg aagctgcgcg 180

gccacccccta gccccccttca cctccttcct cccacttgca cacatgagaa ggaattggat 240

cagagtcggt ccctcaatct aaaccaagag gagtgcccat tgaacatgat ggtgtgcaga 300

tcgcggagag ttgcatcggc aagcgtcgac tcatatcttg aagtgccatg gaggaaagct 360

tgtgaggatg caggggccgt tggtggtgtt ggacttatcg taggttgaac cacatcttgc 420

ttttctttgg tcaatctgct ctcttgtctc tctgagtcat aa 462

<210> 1225
<211> 130
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120h04b1

<400> 1225

tggttcggct tgttctccct gtattatttt gaggctttcc atctgatccg gcctaatttt 60

cggacgtgga tatctgttgt actgctataa tcgggacctt tatctttggt ataaggcatg 120

gttgccattc 130

<210> 1226
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120h06b1

<400> 1226

tataaagtgc cattgcagtt ttgtcaactc tgacattgct ttgggttttc cttctccatt 60

tatctttctt atttgttcct aagaatatgt gtatgtccat gttcatgtac caacatggct 120

cgagaaagca tgctcgtatg tgaatgctat cggtggctat gtatatgcac ggacgcataa 180

tattatacaa tatgtcaact atatacgttt taatggtaac caactcaaaa aaaaaaaaaa 240

aaaagaagaa attgaaaggc aaaaaacaca aaa 273

<210> 1227
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189120h07b1

<400> 1227

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catggcagac cagttcaggg aagctcgacc acgggcggtg gaggtgtacg ctgaggtgct 120

ggacgaagga tgtagcactt ggctactggg ggagcctcat gctccaggaa gcgtgtggtg 180

gcagccttac cgaggcttat gcagtaacaa gcatccgcgc ccccacgacc gaatacatgc 240

gtgcctccgc aaggaagacg actcagacga gagaaggacg ttcaggagca cggcccggta 300

cccatgacct ccctcagatt cagtgacgac tcgtgcaatg cgcatttttc ctttttgttc 360

cccacatatt atgctgatga cggacgccac actactcgat ttggagcatt ttgat 415

<210> 1228
<211> 439
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120h08b1

<400> 1228

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ccatcccggc caaggaccga cgtccccgcc gtcgtctcgc ccgtgcccat acaagtacgc 120

tctggtggcg gcacggcggc cgtctcgctt cgtctgcaag tgcaagaacg tcgtcaacga 180

agtgattgtg gctgaccaga agaattggga taacatggtg atcgcgtgcg agtcgccggt 240

gctggtggag ttctgggcgc catggtgcgg gccgtgccgg atgattgccc cggtgatcga 300

ccaactggca aaggactact tgggcaagat caagtgctgc aaggtgaaca cggacgactg 360

cccaaacatc gcatccacct acggcatgcg gagcatccnc accgtgctca tgttcaagga 420

ccgcgagaag aatgagagc 439

<210> 1229
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189120h09b1

<400> 1229

gacccccccc gtagcggccc attaagcccg gcgggttgtg gtggttactc ccaacgtgac 60

cg 62

<210> 1230
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189120h10b1

<400> 1230

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atttgagttc caataaacca attacacctt cgttgttcac ttgaaagatt gtattattag 120

aaacttcata caaggcctgg ctgtttgtat taccgtctct ttttgtggaa cttgtgctcc 180

ttacgtttta gcctatgcac ttccctaaat caattatagc aatgttggtg cctagcaaaa 240

aaacttaaag aaaaccaaaa taaagaccaa aataaactac acaataaaa 289

<210> 1231
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf1189120h11b1

<400> 1231

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gatccagagc aagacctaca tggaggtgaa gggtaccggc accgcgaacc agtgcccgac 120

catcgacggc ggcgtcgact ccttcccctt caaggccggc aagtacgaga tgaagaagtt 180

ctgcctggag cccacctcct tcaccgtcaa ggccgagggc atccagaaga acgagccgcc 240

ggccttccag aagaccaagc tcatgacccg tctcacctac acccttgacg agatggaagg 300

cccgctcgag gtcggcgccg acggcaccct caagttcgag gagaaggacg gcatcgacta 360

cgcggacgtc accgtgcagc tccccggagg cgagcgcgtg cccttcctct tcaccgtcaa 420

gcagctcgtc gccaccggca agcccgagag cttcagcggg cccttcctcg tgcccagcta 480

caggg 485

<210> 1232
<211> 438
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120h12b1

<400> 1232

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caagcgcgtc catgcatgca cgtaggaagg attatatatt gaactagttg acattgttgc 120

agttggtgga catgctgatg gggaagggca cgctgacgcc gcacttgccg ggcacgccgg 180

agaccttgcc catgttgatg gacttgatgc tggtggcgag gctcttgagg cacctgcacg 240

ctatcttgcg gtccgggctg ctgcgggcca ggccggtcag cccctgcacg ccggagcagc 300

actccttgct gatcgaggac gccctccccg tcacgtacgc cacgcacggn gcgagcttgg 360

agtacacctg cccgtacgac agcgctcgcg aggcctccct gtcggccatc atgagcacca 420

ccgtcgccag gaccacgg 438

<210> 1233
<211> 196
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189007c01b1

<400> 1233

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ttcctggcga gcgcccaaaa acaaaataaa aaaccggcgg tcgctctcgg gggactaatc 120

tatacaaata ccgtaaccgg gcggcttctg tttagcggtg gtaacctaaa atctcagtgc 180

ttggagccat gttgtt 196

<210> 1234
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl189117b09b1

<400> 1234

accatacatg tttgacatgc atatattcat ataggacgag ctccgcgcgc tcatcatgtg 60

tggtgctatc tgctatatat atggataata agaataaagg gaatcatttt cgcttctt 118

<210> 1235
<211> 161
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189119a11b1

<400> 1235

aaatattttt gttggtgggg atgaataatg gtttagaccc ttctatttaa atgttnnaga 60

gtacttgaaa tccttctgct gccgtgacat cagagattgt gaaacatttg atacccattt 120

gcagtttcat ttctgaatgc atgttgaatc tacttatgtt t 161

<210> 1236
<211> 320
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl189120c01b1

<400> 1236

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tcctcccttc cgccgggagc tgacctgagc tgagccaccg ttcgaccaaa ctcgcctcta 120

caagacagag catccccacc ggccggatct ctttttcatc atctcccttt ccgcttcttt 180

gaaatcgctt accaccgnca tggctaagca gcagaaagaa cgcgcacgtc ccgaagttcg 240

gcaactggga caacgacggc aacgtcccct tacacgctct actttgacaa cgcgcgcaag 300

ggcaagggcg gaaagcccat 320

<210> 1237
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042a12b1

<400> 1237

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tacctctttg ctatatccac aggtcacatg tgttgttttt catgttctga gctcttttcc 120

tattaggttg ttgatctcct tgctccttac caaagaggag gaaagatcgg gctttttttgg 180

cggtgctggt gttgggaaaa cagtgcctca tatggaactg attaacaatg ttgccaaagc 240

tcatggtatg tactttccgg gtagtttaaa gtagtgtgca cagtggtgtt ccagtttttt 300

tttaactttg gtgcttcttc tgat 324

<210> 1238
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042c11b1

<400> 1238

aaaagaggct aaaaccaaca aaaagttact tagaagcagc caatagtttt ttttgagttt 60

ctaaggtcaa aatgtgccag aattcaatgc atttgactaa ttagaagagt taaagatgaa 120

ttacgagttg ttagacaaca ctgctaccca ttttgtccct aaaacgctaa aaacaaccga 180

aaattgctta gaagtagtaa acagctttgt tagtattttc atggtcaaaa tgtgtcataa 240

tctaattcat ttaaccaatt cataagagtt agagatggag tatgagtgtt tagacaacac 300

ttttacccat tttattcaaa aagaggctaa aaccaacgaa aaattgctta gaagcagtaa 360

atagctttgt tagtgttttc aaaatcaaat tttgtcacaa t 401

<210> 1239
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042d11b1

<400> 1239

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caataaaatg agcgatgagt tggatctttt gagggaacag aaaaagatat tatctgaaga 120

ggcggcactg caattaagtt ctttaaaacg gatgtcagat gaagctgcaa agtcccctca 180

aaatgaggag attaatgtaa tataatcacc ctgttcatga tatctatatc tagttgtttt 240

actctagcaa aatattgacc ttctcggttc tcgttgttgc ttaggaggaa attaaagtac 300

tcaatgacga catcaaagca aagaatgacc agattgctac gttggagaga cagataatgg 360

attttgttat gacatctcat gaggcattgg ataaatctga tatcatgcag gtaggttcca 420

attgtcaagt attatgcact gacttttttt gtc 453

<210> 1240
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042d12b1

<400> 1240

catatggtat aaaggcgttg aactaattac tgatcccgtc atgtatagtg gagtgtgatt 60

tgtttgtttt acttcatagg ataatagaaa aacaaacaat atatacaaaa ttaactgtgg 120

attacaaata attgtgttca tatatcttat ccacttatat aaactagata ccatgatact 180

tgagcttaaa taattgatca catccgccga acacaaatca tggtcacatc cacatgaatt 240

ctttcattac ttttgtttga gatttaagtc ccaacgggta aattggaatc ttgcactact 300

ttaattgtat atagtttatt gcctaaacag ccaataatca gtttcacaaa caaataaaat 360

ataactaaaa acactccaat aatcagaaag aaaccaatag aactgcaagg aaaacaaact 420

tttttgagta accaatgaat ttttaaactt tgcaaataca aaagaagatt ctgattacac 480

aattttaaat tatgatccgg gcaaatagaa tctcttt 517

<210> 1241
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042f10b1

<400> 1241

ataagggttt gtacatatag atatcgaaga aaatagaaaa aaatattaaa agttcccttt 60

ttgcttcaat ccgtcaacta aaaaaagggt ataaaaggaa ggtaacatta gttgatacta 120

tggtatttaa tagacaagta tttaatacac gcaaaaaaga aaaaaaaagt tctttattct 180

ttatctgaat aatgagtcat ccgacaattc atgatttaga ttcaactact tatacttatt 240

aataaactaa tagcaaggaa gaaacaaatt gagttgatcc gtttacctaa gtaaggacca 300

ataaaatcaa aaattttgat cttcgaaacc aattaaatga aattctaagg gttccatttt 360

atggggcagt gcgcgagaaa ttaaatcata aacaaatgat agaatttgag cgccctgaaa 420

atgccataat atataacatc aaaatctatt acattaatgg ggttcggaaa tggttgaagt 480

agatgaata 489

<210> 1242
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042f11b1

<400> 1242

cctttctaga agtttcaaat ggtcatctga ccatgggctg agcccagtcc acaatattat 60

ggacattcca tggtttttcc gtaatgaaaa cgggctgtat ggtctaaaga ccaattttgt 120

ccatggcctt aatgggctag cccacacggt ttatggttgg cccatcaatt ttttcaacac 180

atcaattttt cttctcttct ctctctctcg gcaacgacgc tctctctccc ggcgacaaag 240

ctctctctcg gcgacgacca agctcgacct ctctctcaac tcctactccg gttagttcta 300

ctagcttgtg ggtttgtcca aatttcaatt gttagtgttt ctgaaagaat cttagctttt 360

tggatatgag gagagctagc tagcaaatgg gcacttttca gattttgttt atggctcgcc 420

atttcgaatt tcattatgaa ttgaagcaca tcaatatgta gagaccctt 469

<210> 1243
<211> 291
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042f12b1

<400> 1243

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ttttaataaa aaagagctcg aagaacatgc gtcggactct ttctcttcct tgaattcatt 120

caattggcca cggcgacaaa acagggagcc gatacagcga aactgataca tcttctttta 180

ttttctggat tcttagggtt ctttttcggg gaatttaggt aattatgtct gtccattttg 240

gtggggcttg ggagatataa aatttgcttt tctttgcgtc ggattctcaa a 291

<210> 1244
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042g10b1

<400> 1244

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tttaaaagtg tcggggtttt ttcagcagtt ctcggacaaa aattgctgag tggccgagaa 120

gaatgggcgt gtcatgcgtg ggctgacacg gattcttcga ggcctagggg tggcggtata 180

taacttgctc gcatgatatt accgagatgt ccccacgggc atcttttcac ctcgtcgccc 240

aagagaatgg gcgtgtcatg gcatgggctg acatggattc tcctaggccg tttgggtggc 300

ggtatagtcg tcttgcgcac gaaataccga gatgtcccca tggg 344

<210> 1245
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042g11b1

<400> 1245

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tggcattgtg tgaggtttgt ggctcatttc ttgtggctaa tgatgcagca gaaagaacgc 120

aatctcatgt cactggaaag caacatgttg gctatggctt ggctcgggat cttattgctg 180

aacaaaaagt aagtctcaga actaatactt gaatcttgtt tcatttgagc tgtcattcct 240

tataaaatgg ggatagtgat gctatgatta ctttttctat tctaggctgc taaagataaa 300

ggaaaggaag aagaaagact agtcagagga aaag 334

<210> 1246
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042h10b1

<400> 1246

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aagacttcta gaattggaaa tatttgattt gattgaacac aaacgacttc ttgaagtctt 180

ctccaaaaac ctacatatgt ttcataagtg ctggtccttt ttggagaaaa aaatgctaat 240

gggggacagg cgaatttgat gcataaaaca aagaccgcat gctttcaagc aagaaaaagt 300

cgcatagaca taagtacaac aaggattaaa agcaatacta aaataaggaa aatatatttt 360

aaaagatttg aaatccgcaa gtagtctata gaaaccaact taagatctgt actagcactc 420

gttgacttct tcgcacg 437

<210> 1247
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710042h12b1

<400> 1247

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cttactgtcc tttgctcgag ttactggtgg gacattgctc aagtttctta attgtttctt 120

cattttgtt cttctgtgtt tatttttgc agctttctcg acatgagccc aggggattac 180

acactgtttt ggtcactggt ggtgctgggt ctattggttc acatgcagct ctaaggcttc 240

taaaggaatc atatcgagtg accattgtgg tatcttcttt ggcttacatg gatttaggtt 300

attttgctca acattattgt aaatgtcgat atcacaaagt aaatctcttt ctgtttaata 360

ggacaatcta tcacggggca atctcgctgc agtcaggatt ttgcaagaac tatttccgga 420

acctggaagg cttcaattta ttta 444

<210> 1248
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066a07b1

<400> 1248

ggaggaaatt acgaaaggaa gaggtacaaa atcgattctc ttaaattcca gcggacaaaa 60

cacaaagcct taaaagtatc tagtggacct tagtaaaagc ccaaatgatg gagcgtgctt 120

gattgaggca tagtacatat gtcatcataa gatgaagatt ttgaaatcac caagcagagt 180

caaaatctaa ggcaatgaca aaacgtaagc agcaggatac aaaagaaaac ctaaccctaa 240

ccgtatttga atccaataaa cgatgttcaa actctggagg agaatacttt gatcgaatcc 300

ctgcagattt ggtcatcaaa atcttatcga aattgtctgc aaagtctatg gccaagtgtc 360

gttgtgtatg taagctcttg tcgtcgataa ttcgacaacc aaattataac cagttgttcc 420

cgatcaagta tcccgatcca ccgaggttca tcttcacctt cttaggtgga ggaatgttat 480

tttcctacac ttcaacac 498

<210> 1249
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066a08b1

<400> 1249

aactcatgat aaatcaaaag gtggaaatta tgtttacgac ggtttatatc ttttggaaaa 60

gtattggcaa caagtcggat ctcacggtat gaatgtcttc aagtttcaac ttaggcgcat 120

acctggacaa cctgaacttt cttgggttga ggtgaagaaa tctaagtcaa aataccggga 180

aggtctatgc aagcttgaca tctcagaagg gaaagagcag tcacccatta gcgctgtgaa 240

cgaaatagac gacgagaaac cgcctttgtt cacctacact gttaaactga tttacccaga 300

ttggtgcaga ccatttcctc caaagtcatg ctgttgcacc acgcgctgca ccgaagctga 360

agcgagggtg tgcgcttgtg tggagaaaaa cggtggagag ataccgtaca acttcgatgg 420

agccattgtt ggtgcaaaac ctactatcta tgaat 455

<210> 1250
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066a09b1

<400> 1250

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ccctatgtaa acatagtatc tatttagata cgctcgaatg acccctttctc ataatgagaa 120

tgtatataac cttattccgg tctggtccgg tatggaatga acttataatc atggaatcga 180

ctcgatcatc agattataga ttataagttc ataaccttag tccattccca ttttgggcgg 240

aaccgatcta ctaattcttt gattccagtt agtattagta agagggatct tgaactaaga 300

aatagattct agaagctaaa aagggtatcc tgagcaatcg caataatcgg gttcattgat 360

attcctggta tagtagatgc tatcacacat acaatcatac tcaattcgat ggaattgttt 420

gatcttaaag gggatattct ataatttcgc atgtgagggg ttatttcttg gtttcgttca 480

gtcattaata acttgattat ttttagata 509

<210> 1251
<211> 249
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066a10b1

<400> 1251

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tccaaccgca tctccaacgc gaaaccaagc tccttcacaa tcgtgaacgc gtttagttgt 120

tgttccgcgt acattggcca cgtggctatt ggaacttcga aacgcaaact ctccaatatc 180

gagttccaac cgcagtgtga cacgaaccct tcaattgctt tatggtgcca gaatttcaac 240

ttgaggagc 249

<210> 1252
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066b09b1

<400> 1252

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gattaattga aaactgattg tcaaggacta gattaatttt caattttggt gtaaatttct 180

aatgtctcct cgaagaaaga ctcttatcat ttaatctcga tatctcactc aaacctatat 240

taaacttatt tagataaaat aattaagctt catgaatttc caattcagaa tcatttcaaa 300

attatttgca ataagttgac ttcgacatgc atattatgtt tagttccttc aaactcccaa 360

aatgattccg atcatatgta ttggtttttt tttttctctt tatttggtca attataatat 420

gtttagaaaa accccatgtg tttttgcatg ttcatggatt ggtcattttc att 473

<210> 1253
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066b10b1

<400> 1253

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cttccccacg aaggagaagc cgcgggcatg ggtgtaaacc gaactcaaca attccttcaa 120

attaggtacg aaacacaggc cccggaactc atcatcgagc gtaacatcgc ccgtgaatta 180

actgagaagg ataggtggta ggtagttcga tgcgcgagca tggagcctac gaacactagc 240

tatccgatca ccactcatac gccgaacgtt caattaactc aaaatcatca atcgttccaa 300

ctaatctacc gaagtactcg gctaagaaga aagaagacgg acgaatccga gccaaagccg 360

tacaagcgcg agataccttc gggacagcct aggcggatcc atgctttcca acgaagcacg 420

cccatccaac ctaggcgaga caagggttca catttcgttc atc 463

<210> 1254
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066b12b1

<400> 1254

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ttaaagtctc tttcagagaa aactaataac aataaaaaaa aaaaaaatcg tcaggtaatg 120

cgcctacact gcgtagatgc attatgtata taatggatca aacaactttg tcatttcaaa 180

taagactagc atgtaccgac acatgatagc atatcatctc aattaatgaa gcttcgcttt 240

ttagttcaat ttaatatcag tttaacatct agcatttgtt tttcatactt attctattaa 300

ttccacgtac gatccgcatt cttcatactt attctattat tttgtccgac ctgatttttc 360

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caaaatcata 430

<210> 1255
<211> 565
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl15710066c07b1

<400> 1255

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gcacggagtt ccattcgttg gtggcaggta aggcttttgt taatttggtt cggttatgat 120

agccttacaa aagtatgttc ggtctttcat gcgtgttatt ttgataggga taaagttgca 180

gcctgtgcca agcattacgt gggagatggt gggacaaccc gcggagtaaa cgagaacaac 240

actgtgactg atttacacgg tcttcttagc gttcacatgc ccgcttatgc tgatgcagtt 300

tacaaaggtg tttccacagt gatggtttca tattcgagct ggaatggtga gaagatgcat 360

gcaaatactg agctgatcac agggtatctt aagggtaccc ttaagtttaa ggtctgctta 420

cttatcacaa cttcaacgca cattctctgt gttctggcag tagtctttct gaatgaatat 480

ttctctctct ccatgtantt tatagattct tgaatagaac atatatatag catgtgtgag 540

ttcttagatg aaggagttga ttttg 565

<210> 1256
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066c10b1

<400> 1256

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ttccaactta aataataaat atgtgatgat ggctcaaccc tgcataaaat cacgtacaag 120

caatcatatg acatttatga ccaatccaat ataaagatta gcgcccatct aagtgttcaa 180

atgttaacca tgagtattgg tcgaggataa attatgagca tatgacttat acgtacaaat 240

acaatagtag tattttaaaa catttttact ttacttaata gttggtggta gtacaaaaca 300

attgatagtt cagatactct ttattcttta acatctttgt tttattcgtg tgcatgctaa 360

ggtatttgcg ttatcttata taagatttct tggctatctc atcaagacaa gaaattaggg 420

atcttatatc tatatattca aatttacgta atgcatgttt ttatttgaag tacatcgtat 480

acac 484

<210> 1257
<211> 496
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066c11b1

<400> 1257

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ctgtctatga gagtgtgtat atagaatggt tgagacccaa attcttccct gtctagcatt 120

ctaacgcata ggtctgcacc tgtggttcaa aatttttcca aggatggaaa tcgaaacatt 180

catatgttag ttcaaaaaga ttcgtttgct ttcattcatc ttttattatt atttcaagaa 240

gatcaacctt gttaataatt ctacctcggc caagttctca tcgggagagc tatttggtgc 300

agtgagattg gacgcagcag ctgtgttgta ccggaagatc cttagttttc cctcctgaga 360

taaatattga gcaaatatca atacaagtca acattttagc gccgagaagt ttttcacatt 420

acgatttagg attaattacc tttgttccat agacaagacc tcccccagga gaaggatgaa 480

agcaagcaac attaac 496

<210> 1258
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066d07b1

<400> 1258

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tctggttacc atttaccata atcattttgt tcaattccta tgttcctctt ggttcctact 120

tatggccatt ttctttttt cttgttcctt tttgttattt ttcattcata ttcctatcgt 180

ttcttttgtt tatcaccaat cagagtctta aaagtaatta ccaatcacaa aagttttacc 240

aaaagcatca ttcttagtct ttattttcaa agttaatttt caccgccttt aactattccg 300

atattgctta taccttcttt tacctataac aaacttgtat ggttttgtat caccaatggt 360

attaatgtat atttgagggg ggggggggg 389

<210> 1259
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066d08b1

<400> 1259

tgtagatgaa atacaataaa ttagtttcca caaccagagg aatacaaaaa ggaaccttcg 60

tttataactc aaaaacaaag aaagaattat taactaaaag aacaagcaac ataccttgtg 120

ccttgatcta cagaatttat tgaattcttt gggtcttttc ctcttagata ctggctttgt 180

tcctcagagt actcctgaga gtcactgtca ccacctccct gtatgaacca tataaggttt 240

tagtcttcca caaacgtttc acaaaatcaa ctgcattttg caatggtata tttctcatag 300

tataagcatc cagtgagact atgctatgga cagtttacca agctccatcg taagtactaa 360

gatatcaatc ctaactgcat caaaaggaaa aaaatctgta acaacaacta caaacctctt 420

ggagggaagc tgctttggct ctgaaagatg cctctaaaaa ttcagcctct ttcttgagct 480

tccttatctt ttctaggtca gagca 505

<210> 1260
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066d09b1

<400> 1260

taggaaaata taaaattaat caagaaaaat agacatgaaa aacatactac tccatatgtt 60

tttgtttggc caataaagag actaactaag ctaatatcta actaaaaaag agtttattta 120

ttatcaattt tataactgag caaattacta atctattatg caaaaagata ttcctaatta 180

ataagatgga ttctactaat tttgataata gatatttgat tcatatatag tgaaaaataa 240

aaatgacctt tagcaatcat taaatttttg gtcacaaaat actaacattt ttcttttctg 300

gcatagcata aattaacttt agatagtttg caataatctt aaggatcaaa agataataga 360

tacaatttat gaaaaaattg ttcttgcaat gtaacaaaga tcacctaaa 409

<210> 1261
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066d11b1

<400> 1261

cctgcaaata tagggtttgt gtattcagac gtgagaactt acacagtcta taatgaaaaa 60

gggggcgtgt tgtgcgaaag attaaataac atctatacac aaaatagaaa aatgttagct 120

aacacttcgc caactatgat ggataggtct aaataaacta tgaatgcttg ggatagatca 180

tagcggtaat aatactagca tatgcctatg tgaaccaaaa catatattat taattaaaaa 240

atatagatat gttaatgg 258

<210> 1262
<211> 569
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066d12b1

<400> 1262

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gaatcacttt acccatctct agctctagga ttctattgcc gcgacaaagg tattgtatta 120

ctacattctc tgaaaccaaa agtttttaaa ttctgtaact tgaaaaaacc tttccctaat 180

cttcaacaga tgatttcgac gatttctgtc tccgagcatt gaaactagct gaggaatcaa 240

acggtgctcc attgttcaca gtgactcaaa cccacacagc gataaaccaa agcaactacg 300

ggtttgcgga tgacgacagc gaggatgaac gtgaagatga ctggcaaatg ctctgatcat 360

gatcatcgtc aaacatttta acaatctcaa gctacaattc ttttttcct tttgttaacc 420

agttctttgt tttttatatg tgttggtgta tattacatca gatcagaaca caatgttgta 480

ctataaaatc ttttgggatt ttcaaacata gattgaagca tgcgaaaatg gaagagtaga 540

gaaatcacaa ggtatatgaa catgatgac 569

<210> 1263
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066e10b1

<400> 1263

ttgggtttat ctcaagaaga tgagccacaa tgtctgtgat ttcttggtct cccattggca 60

ggcgatgtct gaacgatgtt ctttttggta tcaggtactc caatctgttg ctttcctgaa 120

caaacaattt ttccagagag aatgttcttt attagcatat gtgtcttcca ttcaacttaa 180

gagttgcaga gtttttggag ttcagggaat gttcctttaa ggtctctgga aacactaacc 240

tgggtccgat catagagcat tcggcttttt gtgaaatatt tgtgggaatc acgtaccttg 300

gtaagcattt cattatcgaa agatcctacg atttccatat cccttgctag caaactggcc 360

ggcgaatcat tctggaagag aacctgcaaa ag 392

<210> 1264
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066f08b1

<400> 1264

agaagtttat cttctgttct gttatgattt tcattgatac ttaacgaacg tttaagcagt 60

tttaacgatc ttttccctga attttcaccg attttctctt aatttcccgc aaaatttaca 120

taagaacgac atgtttagtc tgttcttttc ttttgaatct cccgaggcag gtacaactct 180

aaatattcaa gttatgtcac tgaagaagat ccaaacgaca taaatcatac gtcaaaacat 240

aaaagaacca acgcgtttct tatgaattct gcttcagctc atggtaaaac ctagctcctc 300

tgtttcctct gtttctatgt ttgctctgtt ttctcttgtc ctctgtattc ttattcattg 360

cttgtacacc aaaaaaccta gcttctttca acgttttctc tcccttctcc tcccagatct 420

aagattacta gaggtagata aagagaagca agaccccaaa tcaccaagag gagccctcga 480

agcctgctta actcgttgct caatctctt 509

<210> 1265
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066f11b1

<400> 1265

gggctatgtt acggacccaa aattacttgc tcaagcattg atttcgaatt ttttcatgca 60

ttatagctcg tttagactag atggggtatc cctacatagc gggtgggacc cacggcgaat 120

ggttcatcaa gtcttcaaaa aagaatatat acgattgcat tgcatattct aacggatgct 180

atcataccat cactaatgca ccggatccca tcataactcc gcagttaagc gtgcttgggc 240

gagagtagta ctaggatggg tgacctcccg ggaagtcctc gtgttgcatc cctcttttat 300

gtttaacctt ttttttttg gttaaaactt tatgactcca taacttttaa accgtgaggc 360

caaacttggc atgtgatacc tttttggaaa gcccaaagac agcc 404

<210> 1266
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066f12b1

<400> 1266

agaaatcatt caaaacaata atcgtcaata aaagaaatat tatatacaaa acaaattagc 60

tcagtagata taaaactctt tctaagaagt tatttatagt tttttatgtc actataatta 120

aaaaatatat taacatagcg tcactattct atagcttttt aatttattgc tttgttgaac 180

acattacata taaaatctat tgcagaatag atataaagaa catataagat gctttacaat 240

gatattacat gaaacatgtt attataaaaa attaaagttt ttaatttgtc ccaaacatac 300

atgttatgtc ttctctctct caagatgtat acatagatga taattagata acaatttaag 360

caatgtaaag gacaaaaaag aatccaagta gaaaattgat accagcgctt ctatttttgt 420

acatgaagtt cttagaatgt tatttgtgca ttttgtcttg tactatgttc cttttgggct 480

gctgcaatac actcatgtg 499

<210> 1267
<211> 567
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066g07b1

<400> 1267

caaaatgcct ctggttcttc tgttcgtttg tctctccctt tgtctattcc tcttctatat 60

tttctatctt ctctttatct tttctcttta actctatgtt catcactact actcatctca 120

tggactatag cttgccacaa gtatagtgga attattaaaa gagaaatgat tttcacattt 180

cgttaattta aataaattta aggaaaacta agcaaaacct accaatgttg aaagaacaat 240

aaaacactcc actagtctta ttattaaaaa gagaaacaaa gattcttaaa agaaaccaaa 300

taagctcgac cctaaatttt ctcttcctcc ggcaagtagt atctattctt caaccaaata 360

gagtctgcaa taacagcttc gtcttcttta tttctatgtc aagtgtaatg tgcatgggtc 420

ctgtttttta tttccaaaag ggcgtgtccg aaactcgcct ccctaaacgc cgagtaactt 480

ggttggggat cggtgaaact atatgaaaaa taaataatct taatcaaaca attcacaaaa 540

cgaaagcttt agtcaaattc actatat 567

<210> 1268
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066g08b1

<400> 1268

acaacaaata acttgtgatt ggcagtaaaa caccgattac cctgttgagg tctaattcga 60

tccttataga tttctctagc tattttctta cgaagctttg ttatagcgtc tataacagcc 120

tctggtttag gtggacaacc cggcaaatag acatctacag gaattagctt atcaactcct 180

cgaacagtac tataagaatc ggtactgaac atccccccctg taattgtaca ggctcccata 240

gcaataacat acttcggttc aggcatttgt tcatataatc gcactaaaga aggagccatt 300

ttcattgtta ctgtacctgc tgttaaaata aggtccgcct gtctaggact cgatcttggt 360

actaacccat aacgatcaaa gtcaaatcgg gagcctatta atgaggcaaa ttcaatgaaa 420

caacaactgg taccataaag aagcggccat aggctggaaa gtctcgacca atttgaaaga 480

tcatttaacg tagttgaaat aacggaattt tttgttgttc gatcaagtat ggga 534

<210> 1269
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066h08b1

<400> 1269

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ctttccatcg tcgtatgtaa cttcaacagg ctcaatctca aattttctgg cacaaaattc 120

tgagaaggtt gcaacctgga aaacgctaaa tgattagtta gctattgatc agctagcact 180

gtaggtttga tttggtaaca acataccatt gtattcaaaa caatcttggc cttcgtcaaa 240

tcagttgcag tacattcaat gaagacattc tttgtctgta agggaattgc tgaaagtgca 300

ccattgataa taggtggcaa tgacagcaca gttctgcaaa agtgagcttt cattatgtgt 360

cagtacgt 368

<210> 1270
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066h09b1

<400> 1270

ctccctccta tgtttctctc atcagctacg ctggaggcga ctatatttat tacatcgact 60

aaaatcgtcc ttccgctgta agaaaaaaaa cattaatctt agatgtcaag gctaattaat 120

tcagttgtat caaacatcat tacaccaagt tctctgcctt tacatgtgaa agaacacttt 180

tgtttgtttg ttattagaaa aaaatcataa cgccaaatgt atatatactt ttattttggg 240

tgattatttg attcttatct tcattaaaat ttgcatgcag ggcttaaaag cactagtaga 300

gaaagtcgtg gataatttac gcgttaatat gatagtattg ggtggcctgc tatttaagaa 360

gatagcagta acatcgctgc agccgatcgg atgccttcct tcttacacct ctgcatcctc 420

gttcaagagt tgcaacgagt cacaaagtgc attggtggaa ctacac 466

<210> 1271
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710066h10b1

<400> 1271

atcgcaccct ggaaaccccg cgatcgttta gtttgattgg acgactagtg ggacacctag 60

gagatctgca agaatcagtg agaagactaa ggctacgccg ataccaaata aagagccacc 120

caagaagcga ggtagaacca aatctgcagt gtcaaagaaa gatgcagaag gtgagaaatc 180

agagggagga ggagaggaaa actctcatgt gaaagatact gaaatgaatc ctccagaggg 240

aatcgcccag aatgaaaatg tgaccgataa gaatggctcc ggtgaaactg agagggtgaa 300

tgatgcaaaa gaaaacattg ttgctgagga aactccaaat gctgctccag ttcaagaaga 360

gggtgagtcg atgaaggaga aagctctgga ttctgttgat gataagagta aggagactga 420

caaagaaaaa gatac 435

<210> 1272
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067a01b1

<400> 1272

aatttaattg cggttctagt tggtatactc actcatacac atgacatcta gtcttatttc 60

gctccaaaac actaaccaag cttcttcttg cttctaaaag cttggatggt ttagtcgaat 120

tccgtatgag tctttgtcta tgtatcttct aacaaggata caatatttag gcttttaaga 180

tccgttgcgg ttctagtttt tatactcact catacacatg acatcaagtc atattcgact 240

ccaaaacact aaccaactgc ttcttgcttc tcaaagcttt gatggtttag ccgaagtcca 300

tatgagtctt cgtcattgta tcttctaaca atgatacaat acttatgctt ttaagatctg 360

ttgcggttct agtttttata cggagtcata cacatgacat caagtcatat tcgaatccaa 420

aacactaacc aagctt 436

<210> 1273
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067a02b1

<400> 1273

gtgtctgcat atacgtcaca ctcttgctca tctctgatgt tatttttttt ttatgtgcag 60

ttagagaact atagcaaaga agagtcccag ctccaaacga cgtcgttaca cagttcctcc 120

tctgtttctg gaatcagaag accatcgtcc tctagtagct caagatcaac gagtagacct 180

cccacgccaa ccagaaagtc taaaactcca gccaaaaggc catcaacgcc gacctcacgt 240

gccacctcaa caactacacg tgcggcatta acctcgtcct ctactactag ctcaacaaga 300

tcatggagaa gaccttcctc tagctccgga actggaacct cacgtgttac cttaaccgct 360

gcacgtgcaa ccagtcccac cacctcaaca gaccaacata ctaccggttc agccacctct 420

actcgatcca ataacaggcc gatgtcggct cctaattcaa aaccgggatc ga 472

<210> 1274
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067a03b1

<400> 1274

caataacact aatacatctc aatacagata aatttttttct taaaaccgcg ctttcaacaa 60

aagtgagttt tttggacctc catgaaatat aacctgagga cttggattta caagcattgg 120

tgcagcttga acagaatggt actgagcggt gtatctctga ggctgtgctc tgttaacagt 180

tggcccaatc atctgcagga aaatgggttg caagtggaag aatgattcat ccatggcaaa 240

acaaacaaaa gttggtggca gaaagtatat ggaagcattt taacagtaca gacaaagcca 300

tatcaattca gaatgatctt ttaatctggt gttcaatact aacatttatg gttgttaacc 360

attcaggcgc ttagtggtga gaggaacagt ctattctcaa ttactagttg ataaaagccc 420

tttgacataa catgcttgaa gagagtaaga taatacttac gtgttgagga aattgaaatc 480

caccgacagc atgtccagcg gtcacattac cata 514

<210> 1275
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067b02b1

<400> 1275

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ataaaacccg caggattgac cggattggtc tctctgaacg tctcaaactc tcgagtatca 120

agctcaggac tacgtcacct gaagccattg aagaacttga gatctctgac cttggagtcc 180

tgcaagctct ctgctaatga catcaggaag cttcaggcga ctgatctgcc aaacttggtc 240

aacttccgtc ctgaataaaa taatatgttc aaaggcaaat tcacgaactc tgtaaataga 300

tcgatctcct ctggtctcag actaagacac tgctcttaga tatatcgtca aaagctatgc 360

tcttcttcgg attatttgct gaagaaactg taaataaagc ttctttcaag ctatggccgg 420

acgaaagagt cctccatggc tcttctacgt ggtcagcttt 460

<210> 1276
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067b03b1

<400> 1276

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gtttgggctg ggctgaattg tttttaccca ccacatcatt cctaaggata attatacagt 180

aacccctagaa aggtttcctc caccttcctt tttccctcct atataaaaaa aatcgacatc 240

gtttttgctc actcttctct cttaggtttt ttttcccttc tcccaatctc atcttcttcg 300

aaaaccttttc ttctttcaaa tttctgtgaa aacatgtttg acgacgagca ccacttt 357

<210> 1277
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf115710067c02b1

<400> 1277

gatggattgt tcgtgtggac gctttggaag atataattgg aggacatgta tggttaggtt 60

ctcatttgta tatttggtgg aatctggcat atcttaacca agccttttgc atgggctcgc 120

cgcgcacttg tatggtctgg ggaggcttac ttgtcttata gtttagctgc tttatctgtt 180

tgtggtttca ttgcttgttg ttttgtctgg tttaataata ccgcttaccc tagtgagttt 240

tacggaccta cggggccaga agcttctcaa gctcaagcat ttacttttct agttagagac 300

caacgtcttg gagctaacgt ggggtctgct caaggaccta caggtttagg taaatactta 360

atgcgttctc cgactggaga agttattttt ggaggagaaa caatgcgttt ttgggatctg 420

cgtgctccct ggttagaacc tttaaggggt cctaacggtt tggacttgag taggttgaaa 480

aaagacatac aacc 494

<210> 1278
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf115710067c03b1

<400> 1278

gtaaggtcct gcaattctgc agaaacatat tgacattttt acttatgcca aaacctttg 60

ttctattttg aagtttgatg ctgttccatg gggtctggaa ggtgttcttc agcatataaa 120

gcatcgctat aacaatcctc caatctacat tcttgaaaat ggtacacttc attctctttt 180

gtcttctggc tctgtttttg tctacttgaa agcaaacctt cttgttctta agattcttca 240

aatcgcaccc gaaaacaaaa acaggttcac cgatgaaaca cgattcgatg ctacaagaca 300

caccaagagt tgaatacatt caagcttaca ttggtgctgt cctcaacgct atcaagtatg 360

gtcatccttt ttcaaatttt agtcctcacg ttaatatatt tgactgatcg gtggtttagt 420

ttcggtttac ttgactctct ctttgtgaca aataatttga ctgat 465

<210> 1279
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067d01b1

<400> 1279

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tttatttgaa gatggtaggt ataagtctga atcaaagaaa ccatctttga aagctgttga 120

tattattgga tttggaactg gggctgaggt agaaaagaag ctgaagtatg ctgaagatgt 180

ttcttacggt gtaattttcg ggagagagct cattaattct cctgccaatg tgcttactcc 240

tggtatgaat tgttgtcatt tatgaaatca aatattttcg tgtttgtgtg gtgttcgctg 300

agttttccta aactgctttg atttttgtat cgtttcagct gtactagctg aggaagcagc 360

aaaggtggct tctacgtaca gtgatgtctt cactgcaaac atcttgaacg aagagcaatg 420

cagagagttg aagatgggtt cttacct 447

<210> 1280
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067d02b1

<400> 1280

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ggaattgctc tgtcataaca cgaagagtgc tttgagagac attgtaacta gaatccatgc 120

atgggtatgc aggagccatt attggcatat gatgatagcg gtcacgacga ttttttcgtg 180

ggtcccaaac aggaaagcta aggtcatctt cttctattgc acaaagcacg actggattcg 240

gccagcgcca ttgtgtatat actctaaaaa atcgtgaaac caacatacta ggaatagcat 300

ttggataaaa ctggcaaagg cgtgcaacca gaagtgccca gtttacacca ccaagaaatc 360

cagttacctg ctcaatataa cagagattac aagagctgta acctaagaat attgtcaaca 420

gatgtgatat tcagaaagac accaccttac att 453

<210> 1281
<211> 139
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067d03b1

<400> 1281

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tgcctgtgcc atgttctcct gtgtgacgtc cttacttgat gtgaatattt ttataggcct 120

tatctgttgg aatatatcc 139

<210> 1282
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067e01b1

<400> 1282

ctatcctatt ctaagagaag agcaaaccca acaaattgtt gaaaagacat ttaggtaaat 60

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ttcttgcctt tacactcacg gcagcaaccg gacagatctt ctgcggtatg acttctactt 180

gtctgaactc ttgcaagccc tatgtgtagg ctaggaaccc aatgaccacc ggaattgatc 240

ccttgggccc ttgctgcaat gccctgtcca aggccgattt ccagtgcctc tgtaagcata 300

aagacagtat caatgtccgt gatatcgagc tttgacctcg ctgagaaact cccggagaag 360

tgtggattag ctgctgcaac ttgctagtag gttttctttc ggaaggtttc gctttgtggt 420

ttggttttca tggttttctt atactgattt atattgatg 459

<210> 1283
<211> 515

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067f02b1

<400> 1283

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tcgacccaat gatcgtgtag ggcttttaag ttcttatttt tacttgtttg aatcctgacc 120

taggattgtt actagaaacc caccatcatt ataatctggc ttgactttgt tgtttttgtg 180

cacatcttga ttgctagcaa tacagtggac tggattgaca ccctgtataa ctgcatcgac 240

atgtttgtgt tttaggggaa ttgaactgaa tcacacattc accataagca gacctgaaaa 300

acctgtttat caatttggcg ccattgccaa ttcattgttg cattgttaca ttcaagatat 360

cagaaacttt taagatcaag ttcttttaca tttatcaagt tactaactca tattttcgtc 420

tgcttgtttt tgtggtatag gtactaatct ttgtgcatgc aaactcgatc caaaggttct 480

gcacacctac taccattcaa agacagaatt gacag 515

<210> 1284
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067f03b1

<400> 1284

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tttatatcaa ttttttcttt aacttgagta cgacgccata aactgtccgt tgccatggaa 120

atcagttctg taccatcatc cctttcacac ttgatgcgtt tgagaaggtc tagaatttga 180

ttaagttcat cacattccaa aaagcagata ctctgaggtg tttccactaa acggcactcg 240

gtagtaatag tgttctcgga aacttcaaat tgtgcgataa gatgcttaac aggaaaccgc 300

atcatccagt ctcgaatact acaagagaga attttacgct ccaacaacaa cacaaggagc 360

aatcggattt ccttgagtaa cttcctgcgc tcttcatctg cagctaaagg ccattctttg 420

gaccacccat tcacatatac aaactctttt acaaactcta gccggttctt gatcatt 477

<210> 1285
<211> 437

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067g01b1

<400> 1285

ttaattggaa tttggttatt caccatgtac gaggatcccc actaagcatc catggctgta 60

tggttaatgc gcccaactca taattggcga attcgtaggt tcaattccta ctggatgcac 120

gccaatcgga ccctccaata agtctattgg aattggctct gtatcaatgg aatcttctca 180

tcatctatac ataacgaatt ggtgtggtat attcatatca taacatatga acagtaagaa 240

ctagcattct tattgagact agaactcata gggaagaaaa tcgatttatg gatggaatca 300

aatatgcagt atttacagac aaaagtattc ggttattggg gaaaaatcaa tatactttta 360

atgtcgaatc aggatcaact aggacagaaa taaagcattg ggtcgaactc ttctttggtg 420

tcaaggtaat agctatg 437

<210> 1286
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067g02b1

<400> 1286

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ggatttgctt tcttagtatc accagcaggt ccattactta acttggcctt aggcttatca 120

gtgggaagag cagacaaccg agattcagca acaatgtaca cttttccagt gttcttgtta 180

cgaaccttca catagacaaa cttcgcattt acacacaaag caagattgct tggaagagtc 240

cacggagtag tagtccatgc cacaaaagca gcattatctt gatccccaat aaccggaaaa 300

gtcaccatga tttcaggatc agggacttcc tgtacataca cacattctac caatatcaga 360

gatcaaacta tacaacacaa atcaatcacc tgaagaacac aataacaaca acattacctt 420

atagttctga ccagcttcaa aat 443

<210> 1287
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067h01b1

<400> 1287

taaagaaaga aacttgtgtg gatcattttt aaatgagatg aaatccagtt gtcagttatt 60

ctcaattaca caattttgtg ttgactttag attctgttag ttctcaccgt ctctttctcg 120

attctacatg ttaggccaag gaggtctctc tagacaatgc atattcagac caagaaatag 180

aaaagaggtc atcagttgta ttgttcaatg cctcaaagaa agaagtgaaa caagaatcaa 240

gcttcaagca ggaaccatta ttatgtgaac cacaaataga agcaagggtt aaccccagag 300

ttttcagata caacccaaaa ttcaaatcac cttcgacgaa caacacttct ttacatgagt 360

tgagaccaat acaaatccaa gaatccatct ccatgaactc caacagacaa aagtctccag 420

tagaccaaga atcatatgac aaggaaaatg ttgacggcca tagtactgaa actggatt 478

<210> 1288
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067h02b1

<400> 1288

cttttaggta tattctcttg tactaacgga tatttgttgt ttctagtatt ttttttcctc 60

agatgaatct gaattcttga tttgtatgtt ctgtacatgt tgtgaagttt aaactagaaa 120

aagtgggagg atagtaactt gaagcatatg agccaaaagt caaactattt aaaaatacac 180

caaaggagct tgagattgat taggtaattt aagttagtta ttctcacgtt ctttaactat 240

atagtagtgc ttatttcctt cctagcatta agttgcagaa aaaacagaga agtagagatt 300

ttttctcttc tcttcaaatt tcatagttca ttaaaatttg tgtgttgaat gaggcaatct 360

catgtttaag attgttctta aattgtcctc tgagtgattc tagttggttt tgtcttttga 420

ctttctgttg tcttgatctc tctattcagg ttttttttggt cacgtgagaa gaagcttt 478

<210> 1289
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710067h03b1

<400> 1289

gactgttact cataaaacca gccacaaact caaccaccat atacgccgta ttgatcaaaa 60

gaaacaacgc aatcttcctc gatttcttgt cgctcaaaat gtgacggata ggcttcataa 120

acatagtgga aaacgactca ggcgattcca taccaatctc ttgataatct gaatacacag 180

actccaactc tctaacagca atgtaaagca acaaaccaca aagcaacaat ccccaaagag 240

atagctcagg aaaatagaag agttccaata ctatagtaca tagaaacgtt acaagaaact 300

ccctctctga gtccttcttc gagcttgaaa acttatcatc attataattc tcactcaaca 360

acactccaaa tacaacagtg ttagctaaag gccaacctaa attcccaaaa gagacactat 420

catcaccact accagagaag aagaaactcc aaatagcaag tgggaacaac aacacagtgg 480

ttagaaacaa agaca 495

<210> 1290
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068a01b1

<400> 1290

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gtgatttgac ggattcagcc tatttctcaa tcgtatccca cgatcaagac aattggctga 120

atcccgcgaa accattttag agaagtccat ttgatatctt ctttttctaa agcaaatcga 180

cttcgattct tgaataatcc acatcacttc tgtctctatt gtaacaaaag attccctttt 240

tatgtggaaa aggcccgtct caataattct gattttacgt ttacgtatgg acaattcctc 300

actatctcgt tcattcacaa caaaacattt tcttcgtgcg gtggtaaaaa aaaacatgct 360

tttttggaga ga 372

<210> 1291
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068a03b1

<400> 1291

tatatgaaat ccatctggaa agcttgaact aattcgatca caacttaaac ttgaacaatt 60

taaaagcata ttataccttg tcgtctgggg ggtcagataa agacccccag ggactatgaa 120

ctgaagcctc aaaaaagtca cgaaggaagc agaaagctgc atatggtttc aaccagccct 180

ttcaaagata acaaaaatcc gtaagccaat ggaacgctga cgtggcctta ggaggcataa 240

gttctatgca gacaattctt aagagatatc aaggaaacaa tatcagattt tgaagcatac 300

cttgctttta gagaagaatt tctggaaggt gcttgagttc aaa 343

<210> 1292
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068c01b1

<400> 1292

gtgacgtttg tttacccctg acatatttat acaaagaaat cgttatagcc tatatcatgt 60

aaatacacac cccacatgta gtgggattaa caataacacg ttttataaat tttaaaacaa 120

atggatttag tattagttaa cgttttaccc attcccgtcg acttttctca aaaatgttct 180

ctcatgtcaa aacaaaataa gaaagaaaga tggtcaaacc atgcatttca cacactaagt 240

atttgggtaa acattcatgc accatttgaa tttcaactct agtggggatc ttcataatat 300

ctctcccata acccctccca tacgaattct ccagacgcct atctatctat ctattattat 360

ttaattcgat ctctatgact aaaaataatc acacattaat atgggagttt ctctaataat 420

ctctagtatc aaa 433

<210> 1293
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068c03b1

<400> 1293

caacgacaat ggcagcggtg gcaaagtggc cttgaagagc tattgtttga cagcttttct 60

atatagcact tgatcattgc tcctgggttg gtgtatatga catccccaac tacacagaaa 120

acatgtaaat gtgaccgcca cagttcttta cattgtgtgt aaccaagtct ttggatttga 180

ttctctttcg caaatatcac accagtattt gccgcttgcc ttttcttcac cataacaaag 240

agtgagtgga tgatcattat acctgggaag cattaccgtt aatggttgag tggcacaacg 300

gaaatccaaa aagtaatctg atttggtaca acctatggcg actc 344

<210> 1294
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068d01b1

<400> 1294

tgtctgtgac tgccactcag atctgatggt tctctttgct taatggaagc tctcaacaga 60

tcttctcact cgaatcacca tcaaggtcag tagtagtgat gttggagttt ttagttttct 120

tggtgttgat gttgctgtgt cttgtttgat gggaa 155

<210> 1295
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068e02b1

<400> 1295

gaacttaaac cgcaatctta tcctaaaagc ctaagttttg ttttttttgtt cgaagataca 60

aagacagaga ctcatattga cttcagctaa accatcaatg ctttgagaag caagaagaag 120

cttggttagt gtttcggagt ccaatataaa ttgatgtcat gtgtatgatt gagtataaga 180

acttaaaccg caaccatagc ctaatagcct aagtagtgtt tccttgttag aagatacaaa 240

gataaagact catatggact ttggctaaac catcaaagct ttgagaagca agaagaagct 300

tggttagtgc ttttgga 317

<210> 1296
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068g02b1

<400> 1296

tttattatgt ttctttacta tgtgtgaaaa ctctaaaatt atattattca gaaacatagt 60

ttgtatgttt cagtgaacaa agttgaagat aaatactttt taaaagtact atactgaaat 120

gctatattta ttatatattg ttaacaatat ttaattaaaa atccgaatgt aattattttc 180

tataaatttt tagatttaat ttattagaaa tattctctta tttctatatc gattatagta 240

aaaaaacttc acaaattctc ttatataaaa tacactttta ggtgtaataa gttaaaccag 300

tgtgttatac aaaaacttaa agcttaatag tgtctacaga aaaaataatt atgcaataac 360

ataatttctt atcttatctc atattaaaac ttctgaacta attatcccgt gcattaacac 420

ggatcattac caaggtttgt aatcaaaatt accttgtttt aattaaatta taattttaga 480

tttaaaataa atag 494

<210> 1297
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068h01b1

<400> 1297

atgggcgacc cgcagggagg ttttcacgaa agttgacctg gagcattttt ttcagcaaac 60

tgccaaagag caggatgatg ataaccagga gctcaattaa gaactgtttg aaaacgcatt 120

gagcctgccc atggtcaaga tcaggcaatg cctggtgccc aggaccgaaa tagaagggct 180

tgatatcagc acacccatcg aagagctgaa gcagcagttt atcactaccc aactcagtaa 240

gctgatcgtg tatgatgata atatcgattc catacaaggg tatgtgcacc agcttgacct 300

gttcaggaaa cccggttcca tcagggagat cctgcacccc atcatggctg tttcggaaag 360

catgagcgct accgacctga tc 382

<210> 1298
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068h02b1

<400> 1298

gagagtctag ggcatagttc caaggaaaga catggccacc taaaggagag atgttccgat 60

tacagaagag agccccctcg gaaaggtcta attttagggg aaccggaagt atgaaagaag 120

taaaggagaa ggaggtattt taaagaagaa gtggttggaa actatggacc tcaactgatc 180

tgttctctct tgtggttttg ctacatatcc tgcattcgag actattcggt aaccctaaat 240

actttaactc caccacataa aaaccaaatt ccccttttcat accaagctcc gtctaccctg 300

acaccttcaa aagagaaaga ccacgccaaa catttcaaag aatgtaaaga gttgactaac 360

gtgaattcaa agttctgtag gatcaaagcg gatggac 397

<210> 1299
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710068h03b1

<400> 1299

gagaaaactt ttagaaaata ttctttttaa aaaatttagg agttagatag atgatttaat 60

tcttgattta cagtaataga atttgcggcg aatttttgtt ttaaaaaaac catgattatt 120

tttttgtcat tttttttcat cgttggatat gtgaaacaat ttattttcac tttactgtag 180

ccttttgcta tttaaagtta cgtcatagag ctcttttagt aatttataaa taggtgatat 240

agtatatttg gaagaaatat aaatattgac cggctttttt tattagtcta attgggttaa 300

ttaattcaca tacaaacaaa ataaaataat aataaacctc gattttggaa gaaatgtaat 360

ttggattcct aattgtaact tgtaagtagt aggtccaaat ttttattagt acatgatgtg 420

attaaatcct tgaaatcatt gtcatattca tatagaagaa aagctgagat ttattattta 480

ttata 485

<210> 1300
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073b01b1

<400> 1300

cttttctatc accaaacgcc cggagccccc ctcgggaagg atcccttatc gaattgcggc 60

cgtctcgatc atctgctcga ttcgacgccg ccggacgatt tgggcgcgga atccggaggg 120

gggaatctgt gcgcgcgggc ggaggcgatc gtggggagca gccatgagcg aggtattcga 180

gggctacgag cgccagtact gcgaggaatc cgcttccctc tcccgcaagt gcaccgccgc 240

ctccgctctc gatggagaga agaagaagca gaggctctcc gagatccagt ccggcgtgca 300

ggaagctgaa tcgctgattc ggaggatgga cctggaggcc aggaatacgc cgcctagcgt 360

gaaagcgggt ttgctagcta agctgcggga gtacaaatct gaccttaaca acctcaagag 420

cgagctcaag aggatctcgg cgcccaatgc caggcaaact accaaggagg agcttcttga 480

gtctggcat 489

<210> 1301
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073c02b1

<400> 1301

gactagtctg tttatgaccc cctatttcat ggttatatgt ttcactgctt cttgctatcg 60

aatgctgcgt tccgggtatt taca 84

<210> 1302
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073c11b1

<400> 1302

tctgttgact accactccgg gtacaaggac gggggggggg cgaccacgca gggggacgac 60

atccagcgca aactcgggaa cctgcccgag aagccggagc ccttcaagcc gccgaccttc 120

gcccccaggg tcgacgccga cgagcagccc aagtccaagg agtggctcga cgcgcgcgac 180

cccgacgagc tcgaggagct cgaggacgaa ctcgacgatg accgcttcct cgagcagtac 240

aggaggatga ggcttgcaga gctcaaggag gcagcaaaaa ctgccagatt cggcacagta 300

cagcccatca caggctctga ttttgt 326

<210> 1303
<211> 268

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073d06b1

<400> 1303

cctgacatgg agggcattcc cccggaccag cagggccgga tctttttttgg taagcagctt 60

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ctccgtctcc gtggaggcca gtaagctcct ggccatggag ctgcttttgt ctctgggttc 180

acaagtctcg tcttcggtgt ccttaaggag tctggtctat gtctgtcgtt gcctgaactg 240

tctttgtttc tataccgtac tatgatgc 268

<210> 1304
<211> 181
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073e12b1

<400> 1304

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tgtctgtccc cccacagctg cactgaatct cgcagcataa gttaggtgtc tccctgaaat 120

cggaatttct cgagttgacc tgcataattc aaattaataa atgttgtatc cttgtatgtg 180

t 181

<210> 1305
<211> 342
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl15710073f03b1

<400> 1305

ccctcgcttc cgcccacgcg tccggcgttc ttgggatcaa ggtgaagatt atgcttgact 60

gggaccccaa gggcaagctt ggccctacca ctccgctgcc tgacctcgtc accatccacc 120

ccccgaagga ggaggacgag ctgcgccccc cggctttggt tgaggtctaa agtcccagta 180

gagcaagcag accatgaaac gtcacatcat tttggtcgta gctagttttc tatccctgtg 240

ataagcgagg gctatgcaac gcttggttac ctattttact ttttaatgga caaaagtttc 300

tgtgtaatgc tgctatgtta atttcgttta aactaagttt tg 342

<210> 1306
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf115710073f11b1

<400> 1306

atctggttat tgctcccgcc gccgccgccg ccggcggggt caccttgag tcttcgtcgg 60

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gcgccagaac cgccccatcc cctactggat ccgcatgcgg accgacaaca ccatcaggta 180

caacgcgaag cgcaggcact ggcgccgcac caagctcggg ttctagatcc ggcccggccg 240

accgccgcgt gggggagcca tggctcaaga gttatctgca ttttgtttta tggacgtttc 300

agtgtttgtt atgcaagcta ggaagtgatc ccaggatgtc tctgttatca atttcttcgt 360

gttatgagga ttgcttgtac cct 383

<210> 1307
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001a04b1

<400> 1307

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttatagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggttctgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cg 502

<210> 1308
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001a06b1

<400> 1308

ctttgtcaca tctagcggat ttggatttct ttaacaacta aggttcctgt ttttaacatt 60

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aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttc ttatcattga atcaacccct ttttttttt ctttaaaca catcccaacc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac 360

ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggtt 420

aactgctcta ataaggagag t 441

<210> 1309
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001a09b1

<400> 1309

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attttataag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttctttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagt 405

<210> 1310
<211> 405

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710001b04b1

<400> 1310

actttgttac atctagcgga tttggnccgc acctagcaaa tggtaagcca agaaagccaa 60

ctgtctggac aggggctttt gcccatctcc aataggtaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtct 405

<210> 1311
<211> 468
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710001b06b1

<400> 1311

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atgtgcagac aaagaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacancgg tgttcgtcaa cctggagagc 420

gaattgacaa aacggctgga gagcggcgag ggcacctttt acaaggac 468

<210> 1312
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001b09b1

<400> 1312

actttgtcac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggttcgggc 420

taactgctct aaaaggagag tcagctactt ggattaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga t 521

<210> 1313
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001c05b1

<400> 1313

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gggcttttgc ccatctccaa tagctaacaa gaactctttc ttttctttac aaatcccaaa 120

acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc 180

ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggttctgggt taactgctct 420

aataaggaga gtcagctact tggataaaaa gagtgatcaa aatgaataag aaaatccaag 480

tattttacgg tatccatgag ttcaaatttg at 512

<210> 1314
<211> 401

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001c07b1

<400> 1314

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aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac 360

ctcacaaaca ctcacaagtt atatagggct tgaaagaaag t 401

<210> 1315
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001c08b1

<400> 1315

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tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggc 420

taactgctct aataaggaga gtcagctact tggattaaaa gagtgatcaa aatgaataag 480

acaatccaag tattttacgg tatccatgag ttcaaatttg atgcagacat gata 534

<210> 1316
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001c09b1

<400> 1316

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggttcggg 420

ttaactgctc taataaggag 440

<210> 1317
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001d05b1

<400> 1317

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ccaatgacga gctcgtcgac gatgtccacc acgttgcagt ctcgccatgg gccccgaatg 120

cgaaccccgt cgacatggcc tggtccgttg cgccggtact gcgatccggc gacttgtccc 180

attcgaccat tcagttctcg ccctcctcgt cggcgcttca gagcttggcc gtgaccctgc 240

aaca 244

<210> 1318
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001d06b1

<400> 1318

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cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc 300

ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc 360

gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga gagcgaattg 420

acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac aagccccaat 480

gc 482

<210> 1319
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001d08b1

<400> 1319

cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatgt 60

gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac 300

cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca ttgagatcct 360

cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt 420

gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga caagccccaa 480

t 481

<210> 1320
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001e04b1

<400> 1320

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aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc cccgaatgcg 180

aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga cttgtcccat 240

tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt gaccctgcaa 300

caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat cctcgtcctc 360

gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga attgacaaaa 420

cggctggaga g 431

<210> 1321
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001e05b1

<400> 1321

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa a 401

<210> 1322
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001e06b1

<400> 1322

caacaacaac aactagttct accgcaacaa caaataccat ttgttcatcc atctatcttg 60

cagcagctaa acccatgcaa ggtattcctc cagcagcaat gcagccctgt ggcaatgcca 120

caaagtcttg ctaggtcgca aatgttgcag cagagcagtt gccatgtgat gcaacaacaa 180

tgttgccagc agttgccgca aatcccccag caatcccgct atgaggcaat ccgtgctatc 240

atctactcca tcatcctgca agaacaacaa caggttcagg gttccatcca aactcctcag 300

cagcaacc 308

<210> 1323
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001e08b1

<400> 1323

gtgttctccg acctcttccc gcacctagca aatggtaagc caagaaagcc aactgacggc 60

attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtc tcgtcaacct 420

ggagagcgaa ttgacaaaac ggctggagag cggcgagggc acctttac 469

<210> 1324
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001f05b1

<400> 1324

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggt 415

<210> 1325
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001f06b1

<400> 1325

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ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggttt 417

<210> 1326
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001f07b1

<400> 1326

tgctctacag tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca 60

actgacggca ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg 120

attctaacct caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt 180

gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg 240

gtactgcgat ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg 300

cttcagagct tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc 360

cgcagcggca ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc 420

gtcaacctgg agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag 480

gacca 485

<210> 1327
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001f08b1

<400> 1327

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ttgcacattt gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttac 467

<210> 1328
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001f10b1

<400> 1328

ttggacgcgt gggcggacgc gtgggcggac gcgtgggcgg cgcgtgggaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa gggggggccc ttt 203

<210> 1329
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001g05b1

<400> 1329

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatgt gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcttcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa t 491

<210> 1330
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001g06b1

<400> 1330

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctgac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagcccca 488

<210> 1331
<211> 103
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001g07b1

<400> 1331

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aaagaaatgc tgctggtgct attcaacgag atcgattcta acc 103

<210> 1332
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001g08b1

<400> 1332

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ttgcacatgt gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

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ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa t 491

<210> 1333
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001g09b1

<400> 1333

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ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcttcgac gttgctcccc ttccgctagc acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttac 466

<210> 1334
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001h04b1

<400> 1334

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggttctgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaa 517

<210> 1335
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710001h05b1

<400> 1335

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtct 405

<210> 1336
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001h06b1

<400> 1336

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atcttcaata gctaacaaga actgtttatt tggtttacaa atcccaaaac ctttactaga 120

ctttgtctgc ttctttagct tacttcacct agagtcttct acctttttctt atcattgaat 180

caaccccttt ttttttttgt ttgatacaca tcccatccca aagtataagc gcccacctag 240

tcctatctag tccgaaaaat gcgaactaga actacatgag acactatctg tgtcgttacg 300

aacctaacac tatgtaccaa gcttaatcgg aataagacct cacaaacact cacaagt 357

<210> 1337
<211> 492
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001h07b1

<400> 1337

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ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttt cgtcaacctg 420

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acaagcccca at 492

<210> 1338
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001h08b1

<400> 1338

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ttcctgtttt taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa 120

ctctttcttt tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt 180

acttcaccta gagtcttcta ccttttctta tcattgaatc aacccctttt tttttttctt 240

ttaaacacat cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg 300

cgaactagaa ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag 360

cttaatcgga ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct 420

aggtttgggt ttgggttaac tgctctaata aggagagtca gctacttg 468

<210> 1339
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710001h09b1

<400> 1339

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga catcggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca cctttt 466

<210> 1340
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710002a10b1

<400> 1340

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cgcgatgaag cgtgcgcatg catgcatgca cctggtttcg tttgtacaac catgatgtaa 120

agtacgaagg ttgaatgcaa aagtctgttg ctag 154

<210> 1341
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710002h10b1

<400> 1341

cccacgcgtc cgcccacgcg tccgcccacg cgtgcgccca cgcgtccgcc cacgcgtgcg 60

<210> 1342
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710003b06b1

<400> 1342

tatcgccctc tttataatgc gatgagaact gagagtgctt tgaagtttgg gtggtttttc 60

ctattttaca tgattcacat aatcttctgc gtgtggtcag ctgcgtctcc cccattccct 120

ttcaaaggaa attctttgac tgggattttg cctgccattg atgtcataac caagagcctt 180

attgttggga tattttactt tgttggattt ggattgttct gccttgaatc actgctgagc 240

ataggtgtca ttcagcaagt gtacatgtac ttccgtggaa gtggaaaatc ccaggagttg 300

aaacaacagg cagcacgtgg tgccctgagc tctgcgttct gatgaagaaa acca 354

<210> 1343
<211> 223
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003b09b1

<400> 1343

gtacgagggt ggagggaatg atcttaaata aattatactc catctcaaag aaagacttgt 60

ttcttcctgc gaggattttt gtaatggtaa tattttcctg tgttccaaaa tccagtgccg 120

ccttcggttt ttatttcttc atttcaaatg gaattgattg atttccattt cataattgca 180

gtcaaattgt caaaatataa tcaaagttat tttttttcat aaa 223

<210> 1344
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003b12b1

<400> 1344

cctgaacttg ccgcagcttg tgaagtatgg aaggcgatca aattcgagtt cgagccggta 60

gatactattg ataagtagat aaaactaa 88

<210> 1345
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003c02b1

<400> 1345

cggacgcgtg ggcggacgcg tgggcggacg cgtgggcgac ggcaagctct acgtctgcaa 60

ggcgcaagcc ggagacaaga ggtggttcaa gggcgccaag aagttcgtcg agaacgccgc 120

aggatccttc agcgtcgcat aaatatacac gaccgaccgg cgagtttaat ggaaatttcc 180

tcagggatgc accatgtaga gaccgatcga gggcatgcat gtgtgtttct ttgatttgta 240

catgaggatg gatgaactaa gaggtcgatt tccctcaagg attcatgtgt gcacaatgat 300

taagaaatct tagtaataat gtttcaaaaa 330

<210> 1346
<211> 136
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003c07b1

<400> 1346

gtggaatctt ctatgctaaa gattacctat cttatgtgct tttaggttga attttgcgga 60

tttgatatgt tattctgttg agacctaagt atctgtgcaa tgagaactgc aaaccacctt 120

gggatggtct ttttag 136

<210> 1347
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003d02b1

<400> 1347

cccacgcgtt cggcaaggag cgtcgaggtc tggctcaccg ccgtcaccac cccgggccat 60

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ctgattatgc ataataacgc atgcacgaac tatgacatcc atgagcagat cgatcaagaa 180

cctatgatgc tgaaaagtta attacaagta atcgaggggc aaatcaatac gcgtatttgc 240

atatatggcg aggtgagggt gagaatcttg agatggtatg aatatgttag agaagacgtt 300

gaagcagggt gcatgttttt tcttcaggct ggttggttca gatctgtagt catgatgcaa 360

acaaatgt 368

<210> 1348
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003e04b1

<400> 1348

cgtacgcgtg ggttgtaatt tagtgttgaa ttgccatcgt acttaggata aattatggcc 60

tgagtaataa agttcatttt aatt 84

<210> 1349
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003e09b1

<400> 1349

aaataaggag gagcctcacc aactaaggag gcccaaacag gacagctgtt gtgtacattc 60

tcctgttcct gccatggagg cttggaggag gaatgccctg cgctgcgcgc ttctcgtgct 120

gctcctcgcc gtttcaagcg gggtggcgag ggctcagggg ggcggcgagt gctggagcac 180

ggacatgggg tacggcatct gcgtgaagcc cggcgggtgc agagctgcct gccatgccct 240

cggcaagaac gacggccagt gcaacggggg ctacttctgg ccggtctgcg agtgcctgtc 300

tccacactgc cactaggatc ggattggcgt tgctactagg caggcagacg cctcgtc 357

<210> 1350
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003f06b1

<400> 1350

tttcgatttt gaaaaacaga tatttatcaa tgagtaaata aatacactgt tgtaactact 60

<210> 1351
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003f08b1

<400> 1351

attaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ccaaaaaaac aaaaggggcg 60

<210> 1352
<211> 68
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003g02b1

<400> 1352

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaa 68

<210> 1353
<211> 374
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710003g05b1

<400> 1353

gtttgccatc cggtttggca ccgttgagaa ttgcaagaag tttaaagact tagttgatga 60

gatcgctgag tcgcttgcaa agaatgaagg cggtgaaagc gaagaaggtt cttccgcagc 120

tggactgctg gagaaactta gtgtaagtga aagcaaacct gaggaaagcg cagctaagga 180

ggaatcaact gatgctagca aggagacaga aaccaaagcc gcgacagccc cctcagagta 240

gtgggcagag caacgcccgt cacaatggta ccgctgagca ttgctcggtg gcaagagtca 300

gtttgtcggt ccttcctgtt gacggaagtt ggtagtcgtt gacgatgaaa tatgctgaga 360

actttntgag acag 374

<210> 1354
<211> 143
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710003g12b1

<400> 1354

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tttgcggatt tgatatgcta ttctggtgag acctaagtat ctgtgcaatg agaactgcaa 120

accaccttgg gatggtcttt tta 143

<210> 1355
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710003h05b1

<400> 1355

acgtcaccgg cgagggcccc ttcgagaacc tgtgcgcgca cctcagcgac cccttcggca 60

acaacctgct caccgtcatc tccggcgccg ccgagagggt gcccagcctg tgagctggcc 120

gttaattgcc cgtccgccgc cgtcggctgt tgatgatcag ctgcatgcgc gcgatgcagc 180

atcatgtgct gtgtgaattt taccggggaa aagtatgaga gtacgaatgt gccgtacgtg 240

taaattatca aggggcagaa gaaacatgac cgttctgatt tctgatggga aa 292

<210> 1356
<211> 136
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003h06b1

<400> 1356

gtttcagaat gtgcgtcgtg ttagatccat gttagaaccc tgttcctctc gtggtgggtg 60

gatgtgttat gcctaatctg gtggtacctt cttgttgcca tcagcaatgg aaatgaaaat 120

gtttgtccct gttctc 136

<210> 1357
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710003h08b1

<400> 1357

ttagaggaga gctcacaaga taagatggcg cacatgcgcg tggtgcaccg ggacgaggag 60

ggccacaagg tggcggagaa gctgccggtg ccggagacga ggcgcccgga cacggccagg 120

cacgtggagc gcaagctgga ggagcagggg ctgcaccggc tggagcgcca cccggccaac 180

gcgccccgga gcgtaggcat cggcgcgccc ccgcccaagt ccggccgcgg ctgcaagtac 240

acctgggagg gccccgaggg gctggtcgac agcgagctcg accccgtgcc cgccgccatc 300

gaccgcaacg accccaacta cgacgaggag gaaggcg 337

<210> 1358
<211> 73
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710004a04b1

<400> 1358

cccacgcgtg cgcccacgcg tccgcccacg cgtgcgtcca cgcgtgcgcc cacgcgtccg 60

cccacgcgtc cgc 73

<210> 1359
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004a10b1

<400> 1359

tttacgcgtg ggtgtgttct ctcttcacat gtgtgtattt tacaattgtt caaattgttg 60

agaaccattt catg 74

<210> 1360
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004b05b1

<400> 1360

cccacgcgtc cgcgcaaagt tcgaggagct caagctcaag gagatcaaga acgggcggct 60

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gctggagaac ctggccacgc acctcgcgga cccgtggcac aacaacatcg gcgacatcgc 180

catccccaga aatatctacg gcccttgagc ggagccgacc gggctgaggg gagatcgagg 240

agccggagca catggttttc attcatgttt ctgcgtcgat cgactggttg atcaacttgc 300

cacgctggct ctgcgcgcgt acgtccgtgc gtgcaggaac tgtacaac 348

<210> 1361
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004c04b1

<400> 1361

ctttacgcgg ggtttatacc agttcgagcc ggtagatact attgataagt agataaaact 60

aaagataaag aagagaaggc ctaaataaaa aagaaacgaa actaaatgga aaaaacat 118

<210> 1362
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004e01b1

<400> 1362

gttgatcatc actgacaggg agacgggccg atgccgcggg tccgggttag tcaccttcgc 60

gtcggacgag gcgatgcgcc aggctatcga ggccatgaac ggccaggacc t 111

<210> 1363
<211> 124
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004e04b1

<400> 1363

tcgcttttgt tatttataat atgagtcctt agctatctgt tcaactaaaa aaaagttgtt 60

atctgttgga catgtttgtg agattgtata attacatatg tattatgaag ttgctagttt 120

cagt 124

<210> 1364
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004e05b1

<400> 1364

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cgccggcggt gagggccagg ccgtcggccg gcacggtgga cgtggcgcgc ttcgcgttcg 120

gcagcgccct gctctggcac cccagccggt gggacagctt ccccgtctac gagcccgacg 180

cctcacagga tttcgtgaag ttcgtgcatc ggttggccgc ggtggattac aacaagtctg 240

gggggatgcc caaccgggat tgctcggagg ttatggtg 278

<210> 1365
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710004e06b1

<400> 1365

attaattgca cctatctcat aacagaccag tagcttgaaa ccatgcatgc atgcagtacg 60

atcgactaca aggactggca agcaagcatt ttagtgtttg tgtggacgtg tacatataca 120

aatcactgca tggaatattc aagaggaccc tacgt 155

<210> 1366
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710004f05b1

<400> 1366

tcggttatga tgactttgct gcggttataa ttgatcaaaa aggcaatcca aaaggaactc 60

gagtttttgg cgcgattgcc gtggaattga gaggattgaa ttttaccaat gtagtttcat 120

tagctcctga agtattataa atactagtgg gcgaaattga gatcaaagaa ttaatttagt 180

agattgtgtt ttacgtatat gttttaaaat ccaaaatgaa aaaaaaaaaa agaacacatg 240

ttgattatag 250

<210> 1367
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710004f11b1

<400> 1367

ctcacgcgtg cgaccacgcg tacggccacg cgtacgctag ttctagctca aaaaaaaaaa 60

aataaataaa catga 75

<210> 1368
<211> 98
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710004h11b1

<400> 1368

tttcgtccgg tcgatgactt tttttgcaca acaaaagtta tggacgttca aacagacttg 60

ctggctgacc gtgtgaatgt cgatgacttt cgttgtgc 98

<210> 1369
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005b03b1

<400> 1369

taacaccctc atcaggcctg atggcaagaa gaaggcgtac gtgaagctga caccagacta 60

cgatgctctt gacgtggcca acaagatcgg catcatataa gccagaggga gggtcctgca 120

gtaggcgctt gtgtcgtggt ttcttatgtt atcggaattt tgtagttgtt acttagcaaa 180

gggccttagt ggctccattg cctaccatat cgctgcacac tttcatgaat ttgatgcaat 240

cgaagtgact tgtgttgatg cta 263

<210> 1370
<211> 242
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005c01b1

<400> 1370

cccacgcgtg cggtccgcct caggcccgtc ggggaccccc ctgaccgcct tcccgcggag 60

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cacggcctcg tgctcatctg cgacacctcg cggaacatgg tgactggtct gggaccccgc 180

caccggcggc cagcactggg aggacgctca gggagaaaac ccccatcagc tgggcggggc 240

tt 242

<210> 1371
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005c08b1

<400> 1371

cccacgcgtc cgcccacgcg tccgcccacg cgtgcgccca cgcgtgcgcc cacgcgtccg 60

cccacgcgtc cgcccacgcg tccgc 85

<210> 1372
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005d03b1

<400> 1372

ctactcccca gtggccagca actctgaacc tcccggacca agttagcaat ggcaaagcgc 60

ctcgccgtcg cgctcctgct gctggtcctg ctcgcgtcca gcgacgccgg tgctgctgcc 120

cgtgctg 127

<210> 1373
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005d05b1

<400> 1373

gcttaaaaga aatatttgtt tgggtttcca ttgaactttc ttctatgagt tggtttcacc 60

agggagggga acctggtgat taatcatggt gttgggtttg ggatgtgtaa cctgggtttt 120

gtggagggtt tggaatcaaa tgcctatggg ggtcgactaa tcaaggccgt gttgcatcaa 180

gctgctcaag gagaacaaaa atgtcttgga agacaggagg tggccatctg atcgtggcgc 240

tatcttcttg atctcttggt gttagtctga ttttgtggtg tggtcttgtt ctgtactctg 300

ctg 303

<210> 1374
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005d06b1

<400> 1374

catacgtggg cctggtgccc catcgcagga gacagccatg ccggcagcag gaaagtccat 60

caatgtccgc gaattcatcg acgagcgcgc ggtcagcccg ttccagtggc tggtcgggtt 120

tctgacgttc gtcgacatct cgctggacgg atgggatacc gtcatcatcg gcttcgtcgt 180

gcccgagctc atcaaggaat ggggcgttac caagagcgcg ctggcgccgg tactcagcgc 240

cgcgctgttc ggcctcgcgg ccggtgcgct gctcggtggg ccgatcgccg accggttcgg 300

acgcaagcgc gtgctggt 318

<210> 1375
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710005d12b1

<400> 1375

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tactccccag tggccagcaa ctcggaacct cccggaccaa gttagcaatg gcaaagcgcc 120

tcgccgtcgc gctcctgctg ctggtcctgc tcgggtccag cgacgccggt gctgctgccc 180

gtcctgctaa tggcgtccgc gagaagaagg ctctggtgcc cgggctgccg gtggacctcc 240

ctgggctccc tgggctgcct gggctccctg ggctccctgg cctgccgggg ctccgtgggc 300

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tgctggctta catgcaagct 380

<210> 1376
<211> 99
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710005f07b1

<400> 1376

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ttttggtcct tgcggatatg tacctgattc ggacctgtg 99

<210> 1377
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005g09b1

<400> 1377

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agcctcctga gatatcatca tcggtaaatc tacctgaaca gatcgccata ttcgggcaga 180

agttcagcct ggggactgtt aaggagctgc tggagccttt gcagcgagca tttgctagca 240

ttgcagggtc catctctggg cagccacccc tcaaggtacc gattcctggg gacaacaagg 300

ccaaggtcgt ggcttttgac aacctacctg gacaaagac 339

<210> 1378
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005g12b1

<400> 1378

cggacgcgtg gtcccacgcg tccgcgaaca cacaccatat caatcaagaa aaccccgaga 60

ggatcatggc cggcgtgaac accagtgtgg tcggcctcaa gcccgccgcg gcggtgccgc 120

agtccgcctc gtcggcggag gcaaagcgcg tgcaggtcgc cccggtcaag gaccggcggt 180

tggcgcttct cggactggcg gtggtcttcg ccgtcacggc cgcctgcgcc gggtcggcca 240

gggcaagcgt ctttgacgag taccttgaga agcgcaagct caacacggag ctgtccgaca 300

agaagagggc ggcgaccagc ggggccaact tagcgcgcgc ctac 344

<210> 1379
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710005h08b1

<400> 1379

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aattagtggg tctgttaatg tccatcggta cttgtatgct tgtgtgtggc 110

<210> 1380
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710006b02b1

<400> 1380

cccacgcgtc cgcggacgcg tggggatcga tcgatcggtg cgcggcgtcg ccgtcggaga 60

gagacgacca gaaggtgcag ttcccgccat gattgggacg gctgcacgaa tgaccggggc 120

ggtgggtcaa ctgccgccgg tgggtcaccg aaaatttctc cggttttcac acgctgcttg 180

ccggaatgta cgaggatcaa cggcagccac tagcaaatgg cagaagaaac aagacgcact 240

ttgtacttat tttcgccttg catggctctc gtgttcgcgt caaaaatgcc ctatgagaga 300

cgctaatatg aaaaaataat attggtgtac atgatgggaa aacgtcacaa ttgttggtat 360

acaatg 366

<210> 1381
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710006c04b1

<400> 1381

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ttagggttta gtagtagcgg ggaagaggaa ggaatggcgg acgtcgagta ccgctgcttc 120

gtcggcggcc tcgcctgggc caccgacgac cagtccctcc agaacgcctt ctccaagtac 180

ggcgacgtca tcgactccaa gatcatcact gacagggaga cgggccgatc ccgcgggttc 240

gggttcgtca ccttcgcgtc ggacgaggcg atgcgccagg cgatcgaggc catgaacggc 300

caggacctgg acggccgcaa catcaccgtc aacgaggcgc agtcccgtcg ctccggcgga 360

ggaggcggcg gcggcttcgg cggcggcggt ggcggcta 398

<210> 1382
<211> 364

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710006h04b1

<400> 1382

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gctgaaagca gagattgagg gccttcaact ggaacttacc catgcaagtt gtattgtttg 120

caggaatgca tgtgaattgg agcagaaggg gaatttcgag ttggtggaac aaaggaaagc 180

aatggagaag agtatgattt cgatggcaca agaaattcaa caaatgcggg ccgaattagc 240

taattttgat ggcagaccat ggggcacagg tggagcacat gggatgaagc tgggcagtcc 300

tgaagcgacc ttccctactc aatatggaga taaatacaat atacatgcgg ggagtttctg 360

agaa 364

<210> 1383
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008a08b1

<400> 1383

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aaaaaaaaat ctaaaaataa taaaaaaaac acaccacccg taccaaaaag 110

<210> 1384
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008a09b1

<400> 1384

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ccgcccctac tacgcctggt ggcgaggacg ccccgcccgc gccgtctagt gacacctccc 120

cgaccacccc tggtggaggc tactacccgc caactccgtc aagcggcact gcaccaacca 180

cgcctgggac tggagactcc ccgccagcgc cgtccagtga cacctctccg actacccctg 240

gtggaggcta ctacccgcct actccgtcca ccggtactgc cccaaccacg cctgggactg 300

gagactgcct gccctcaccg tccgccggca cctctcctag cacccctggc ggtggtgact 360

acccgccctc gccagccagc ggcgctgcgc ctggtggcgg gaactgccct ccctcgccgt 420

ccgccggcac ctctcctacc a 441

<210> 1385
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008b01b1

<400> 1385

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gggcgtacgg taaaggttgc ccccatccag gcagagccca gggatcgata tgtgtatatt 120

atatataaca atgctacact gtaacatgaa atgaaatgca gaggaattaa aatgcgtgag 180

tttccttaca aaggcaacgg t 201

<210> 1386
<211> 100
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008b02b1

<400> 1386

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aaaagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaatggg 100

<210> 1387
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008b06b1

<400> 1387

gggggggggg ttttttgggg ggtcccgttt ttttccccgg ggggttgggg ggtttttttt 60

ttttttgggg gccctttttt tttgtttccg gggccggttt ttccccctgg gggggtgggg 120

aaaccccggg ggcccccccc ttt 143

<210> 1388
<211> 98
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008b07b1

<400> 1388

attaaaaaaa aaaaaaaaaa aaaaaggaaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaag gggggccgtt tttgaggt 98

<210> 1389
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008d10b1

<400> 1389

tcgtccctcc tctctgtgga ggaaggagag agacggaccc caacatacag gggcggagag 60

ggatcatgct gaagcttagg ctctgtctcg tcgggctccg gccagagacc gactactgct 120

aagaggatgg ccaatcggac cagcgtgccc aagttcggca cctgggacag ggacgatgtg 180

ggctacacgg tctacttcaa taaggtgcgc gagaacaagg gcgccaccgc gccgacggtc 240

catgggacgc tcaaccccaa cgacccttaa gaggaagccc cgagggtgat ccccc 295

<210> 1390
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008e01b1

<400> 1390

cttggcttca tgaaataaaa tcctccatgt attctcaaat gttgcatggc gtgcattaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaggg gcgg 144

<210> 1391
<211> 401

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008e02b1

<400> 1391

cccacgcgtt cgctcgcggt atctttttca ctcaggactg ggtatccatg ccaggtgtta 60

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gggacgattc tgtattacaa tttggtggag gaactttagg acatccttgg ggaaatgcac 180

ctggtgcagc agctaatcga gtggctttag aagcctgtgt acaagctcgt aacgaagggc 240

gcgatcttgc tcgcgaaggt aatgaaatta tccgagcagc ttgcaaatgg agtcctgaac 300

tagccgcagc ttgtgaagta tggaaggcga tcaaattcga gttcgagccg gtagatacta 360

ttgataagta gataaaacta aagataaaga agagaaggta t 401

<210> 1392
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008e09b1

<400> 1392

cccacgcgtc cgcccacgcg tccgcttgag accatgcttg caagccagtt atgaatatca 60

tttgtagcaa aa 72

<210> 1393
<211> 165
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008f04b1

<400> 1393

cccacgcgtc cgcccacgcg tccgaagatc atgcaaattg ctttgttgca tactactccg 60

tacataacat agttgaacca tgagcatcca tcactctata aaatcatact aaaatatgtt 120

atgtacggag tagtatgcaa caagatcatg caaattgctt tgtaa 165

<210> 1394
<211> 243

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008f11b1

<400> 1394

cgacgggggc ggttcgccgc ccccgacgtc gcgagaagtc cattgaacct tatcatttag 60

agaaagggag ggtttactgt cgacgatgag gacattgaca agctccttgc agagattgag 120

gaccggcctg ctgccgctga ggagcctgag cccaaggcag gcaaggcaga ggatactgtg 180

cctgctgctg ctgctgctgc tgctgccacc agtgtggatg atgctgaagg gaagaaatcg 240

aag 243

<210> 1395
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008g11b1

<400> 1395

cccacgcgtt cgcccacgcg tccgcacgag cagagcagag tggtgaactg atattgtgtg 60

cgccgtacta tgtgcgtctt tatgtaatgt gcgtgcttta tctataaact a 111

<210> 1396
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710008h03b1

<400> 1396

gtcctcatgt acgccaagcg tgccttcgtc cactggtacg tcggtgaggg catggaggag 60

ggagagttct ctgaggcccg tgaggatctt gctgccctgg agaaagacta tgaagaagtt 120

ggtgctgagt tcgacgaggg tgaggacggt gacaagggcg acgagtacta cagcctgcct 180

cctggtgctt tcgcaaggcg tgctgctgct atcccatgat ctgcccgagt ggctttatct 240

gttatctgtc tgtttgaatc tttgctttgt ggtgtttgtt ttacaacctg ttgtgttgga 300

agacccttgt atctttgaac ctgttatgca ccttggttaa tatgcatgct atctggttat 360

ctaa 364

<210> 1397
<211> 91
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710008h09b1

<400> 1397

acgcggacgc gtgggcggac gcgtgggcgg acgcgtgggt ggatcgtggt ctagtcgtgt 60

ataatagctc tgcctgctac ttttgtccgg c 91

<210> 1398
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009a01b1

<400> 1398

cctacgcgtt cgtccacgcg tacggccacg cgtgcgccca cgcgtacgtc cacgcgtacg 60

<210> 1399
<211> 221
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009a02b1

<400> 1399

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gcgaccatag ccacgatgac catgctcaag cccgccaaga tcacggccag gtcggcgcct 120

tcgtcgtcac cgtcagtcag caccaaggtg gcgtccccga gcatctcgct gcgcagcctg 180

cagaagaacg cggccaagaa gggggccctg gccgtgtcgc c 221

<210> 1400
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009a03b1

<400> 1400

tcgcggacgc gtggggaccc acgcgttcgg ccacgcgtgc ggtactagat cgcg 54

<210> 1401
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009b11b1

<400> 1401

cgtcttgttc ctatttcttt gcattgcaca catacacagt tttgtttcat ggaaagtttg 60

tagccctact gctagtgttt gatgatgatg atggcgatcg ccattttgtc caatcaaatc 120

aa 122

<210> 1402
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009c01b1

<400> 1402

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cttgagctcg gagagaactt tggcatggca acagaatctg cacggggcgt tgtccaacac 120

aaactgaaac agcatatgcg gatcatctat ctactgacgt ccggctcgcc ggagggcctc 180

acgccggcgc gatggacacc ttgtcgacct gcacgacgta ctcgagcgtc gccccggggg 240

gcacctgcgc gccatcgtcc ccgaaatccg cgccgtcctc gccgaagccc aggctcgccg 300

ggacgaccac gcgccgcttg ccgccgttcc gcatggaccg cagcgcgtac tcgatgccct 360

c 361

<210> 1403
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009c03b1

<400> 1403

gttgagttat atcatttgat taaagacgat gaagaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aataaaaaaa gggcggcc 88

<210> 1404
<211> 184
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009c12b1

<400> 1404

tccacgcgtc cgagagaagg tataaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aggggggggc 180

tttt 184

<210> 1405
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009d12b1

<400> 1405

ctcaccctcc cttctccccc tcccgaagca gcgatggccc ccaaggcgga gaagaagccg 60

gcggcgaaga agcctgcgga ggaggagccc gcggcggaga aggccgagaa ggcccctgct 120

gggaagaagc cgagggccga gaagcgggtt ccggcgggca agaccgcctc caaggagggc 180

ggcgagaaga ggggcaggaa gaagggcaag aagagcgtcg agacctacaa gatctacatc 240

ttcaaggtgc tgaagcaggt gcaccctgac atcggcatct cctccaaggc catgtgcatc 300

atgaactcct tcatcaacga catcttcgag aagc 334

<210> 1406
<211> 66
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009e03b1

<400> 1406

cccacgcgtg cgggccgtct catgatttgg cgatttcaat tggtttaaag caaaaagaat 60

aaccct 66

<210> 1407
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009e04b1

<400> 1407

acgcccacgc gtgcgcccac gcgtccgccc acgcgagcga ccacgcgtgc ggccacgcgt 60

ccgaccacgc gtacgtgtac tgctgacacc taattctctc ctagaaaaaa aaaagacaaa 120

gaaaatatga ggaggag 137

<210> 1408
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009f05b1

<400> 1408

cggacgcgtg ggttacgagt cacctatgtt gcacctccac agccaccatc tccagttcct 60

gaagaatccg aggaaggctc cccatctagg gttgaatcag aaaatggaga tggtcctgct 120

gggggattca ccagagcact gcgagaacgc attgagcccc aagaaaaatc tttagaggct 180

ggagctttga tctccaagtt gaccgaagaa aagaattctg caattcaaca gaaccataaa 240

attagacagg aacttgatat gatgagacgg gaagtcagca agaggcgcgg tggagggttt 300

tcctttgtaa ttgtcataat tgtagctttg atcgggatct tcctgggcta catgatgaag 360

tcataattct tttcatccgt atcacttgac cgtatcgaag ggaactggac ttgctagtca 420

tgtttgggaa cttgaaagat cattcgagat caaat 455

<210> 1409
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710009f06b1

<400> 1409

attttccatt tatttagtta gtttttctta atgaaattga aattattaaa gagggcaaat 60

aaaaataaag aaacaacttt gctgaccatg atatattttt atctaggcgg aagagtcctc 120

ttaatattta tctagtctta tataggtttc ggtatattga aatataaaca taaaaaagaa 180

gatagaggat aggctcatta cttaaaaaaa agatatggaa atagctatag a 231

<210> 1410
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009g10b1

<400> 1410

ctgaaggaga gggagctagc catgatgaag actgggggggt gatgatggga tttggaccgg 60

ggttcactgt ggagacgatg ctgctgcacg ctgccaccta ggtaattag 109

<210> 1411
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710009h07b1

<400> 1411

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gc 62

<210> 1412
<211> 192
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf15710010a04b1

<400> 1412

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gcatgtaccg ttccaaacct gccatgttgt cctccctctt ttgctcgtct tcgaccactc 120

gaaatgtaag agaccaatgt tttatagaga aatactggga actgtttgaa taacacccccc 180

agcaatttgt gc 192

<210> 1413
<211> 343
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710010b07b1

<400> 1413

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aggagccact cgacgaccct gacaataaca acatgaggcc ccaacaggta tacacgggcg 120

tttggctgag gcattacacc cctgtgaggg aacgagtgac atctaaccag ggcgaggaac 180

ttggtcagat cgctacatcg aacgcgacga ggcgtcgccg tgccggttct tccctgtaga 240

acaacagcac gcatggatgc atggtgcagc atccagccca cacaataaac caagctgctg 300

tccttgccac tcacaacgcc tcagcggctc gagtatgggg gct 343

<210> 1414
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010b08b1

<400> 1414

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ccagacgccg tcaccgtgaa ccccaggaac gagccgcaag accgcgcgcc tgccgacgcc 120

gccgtgccgc gctccgtgaa gtcggtcggg cccatcgagg actactggtt tgtccccgcc 180

ggcgtcgaca tggcgggcta ctccttccac gtcaccgagc cgatgctcac gaggctgcag 240

cagcaggagc cagcggctgc cggcggcgcc ttcgagctca tctcggcgct cctgtggcag 300

acggtggcga agatcagggc cgccaaggag gtgaagacgg tgacggtggt gaggaacgac 360

atgtc 365

<210> 1415
<211> 266
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710010b10b1

<400> 1415

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agacgtgggg atggcggtgg agaccgcccc catagcgctc ggtgatctgg agacggcggt 120

ggagaccgcc cccaaagcgg cggtcggcga cgccaacgtc aaaaggtttt gcgccgaaac 180

gccctacccg gacgtctgcg ccgacatgat cgcgcgctac gacgacgagt gcaaaggcgc 240

cgacgacaag aagctggcgg ggatgg 266

<210> 1416
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010c01b1

<400> 1416

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agagggcgca cagcgaccgc tacatcggcc tcaagcaaag ctggcgtagg ccaaagggta 120

tcgactcccg tgtcaggcgg aagttcaagg gatgcacctt gatgcccaac atcgggtacg 180

gttcagacaa gaagacaagg cactacctgc ccaacaagtt caagaagttc gttgtccaca 240

atgtctctga gctggagctg ctcatgatgc acaacaggac ctactgtgcc gagatcgcac 300

acaacgtgtc cacccagaag cgcaaggcga tcgtggagcg tgctgcgcag ctcgacgtcg 360

tggtcaccaa caagctt 377

<210> 1417
<211> 283
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010d05b1

<400> 1417

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ctcgtgccaa gcaggttcat gcgctcccgc cagctctcca ccaagcatgc tggcaagatc 180

ccgaaggaac tggagccgtc tgaagtggaa gctaagttga agctgacgag ggcgaagctg 240

ggtgcaacgt tagataaatt ggagaaggaa cagccagatg agt 283

<210> 1418
<211> 101
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010d08b1

<400> 1418

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aaaacaaaaa aaaaaaaaaa aaaaaaaaaa aaacaggggg g 101

<210> 1419
<211> 117
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010d10b1

<400> 1419

cggttactct tagctgctca gagagagcta agcttcagtc gattattgac ggttgaacca 60

agtgaggctg tgaattgtcg ttgttttcat ctatcaataa aatcttgtac gtactct 117

<210> 1420
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010d11b1

<400> 1420

cctacgcgat ggatcatcgg gctgcactgg ttattgcctc ttgatgaacc tttgtgatac 60

ttcggtggtt ctag 74

<210> 1421
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010d12b1

<400> 1421

cctcgcgatc gccacgcgtc cgccccctca acaatgcaag ggctaccgtc aaggcgacgc 60

aaatgatgag acagttctca gacgtcgctg cagagcgtgg acttccaatg gaggagttat 120

ggaaatgata aaacaaaatc attcaactgc ctgagggaat tcttttcttt tttctctact 180

gtatttcttg agtttgtttt ctgttgtatc tatatattgg gataaatagg ggtgcaaatg 240

ggggtaccct ttgggggtac tctatatgac ttctgaaaat ttagttcact tggttgaact 300

aaggtgggtc ggact 315

<210> 1422
<211> 149
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010e07b1

<400> 1422

actcaaaatt taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag aaaaaaaaaa 120

aacaaaaaaa aaaaaaaaaa acgggggggg 149

<210> 1423
<211> 182
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010e10b1

<400> 1423

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg 180

gg 182

<210> 1424
<211> 175
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710010e12b1

<400> 1424

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tcatgtacca acatggctcg agaaagcatg ctcgtatgtg aatgctatcg gtggctatgt 120

atatgcacgg acgcataata ttatacaata tgtcgactat atacgtttta atggt 175

<210> 1425
<211> 131
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010f09b1

<400> 1425

taacggttcc tgcccgctgg actctgatac ggaggagggt tcaccaccaa gacggcatga 60

gcagcagacg atatgtactc ataagacgag gagaggaccc acaattggtc gatgtgcatg 120

cccttctctc t 131

<210> 1426
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010f11b1

<400> 1426

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ctccaccttc agcggcgacg agaccgcccc cttcttcggc ttcctcggcg ccgccgccgc 120

cctcgtcttc tcctgcatgg gggcggcgta cgggacggcg aagagcgggg tgggggtggc 180

gtcgatgggg gtgatgcggc cggagctggt gatgaagtcc atcgtgcccg tggtcatggc 240

gggggtgctc gggatctacg gcctcatcat cgccgtcatc atctccaccg ggatcaaccc 300

caaggccaag ccctac 316

<210> 1427
<211> 382

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710010f12b1

<400> 1427

tctgccgcat gatgacaaca agacggacca cctcaatctt ggcctgatga acctggatct 60

taagatgaat gatctcaaga tgaacgaggc tgccatgaag tacccttttcc gcaacatggc 120

ctattacatg aatccgatgt accccaaggg aaacaacggt aatgtcaatt cgttcaagat 180

gaatgttggg gtcaacaaat atcccaataa tcagaatggg aaggaaacaa acggcaaaca 240

caatggtggt aacaacaaca atggaggcaa cagcaacaac aactctgttg acaagcgctt 300

caaaacattg ccaacaagcg agatgctacc gaggaatgaa gttcttggtg gatacatctt 360

tgtctgcaac aatgatacca tg 382

<210> 1428
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077a10b1

<400> 1428

tttttgataa agcactcact gtacagtgta acaaagagga gatactcata catacagcag 60

tactaaataa agtccatatc aggctgattt gcaaaaa 97

<210> 1429
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077a12b1

<400> 1429

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ctcctcgcca agaccatgga gcccgacgcc gacgtcgtcc tcctcgaccc gaaggactac 180

ttggagatca cctgggctga attgagatca acggttgaac catcttttgc tgagagatca 240

ttaatatatc acagagatta cctcaccact gctactatt 279

<210> 1430
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077b04b1

<400> 1430

tcgtaggcgg acccgccgcc ggccgagggc ctgcgcgtgc agaggtgggc cggggcgagg 60

tacgcggccg tgcgccggtt cggcggcttc gtagccgacg ccgacgtcgg caagcaggcc 120

gcgctgctcg aggccagcct gcaggggacc aggtgggccg cgcccgtgtc cgacggccgc 180

aaggccgacc cggcgtccga gtacaccgtg gcgcagtaca actcgccgtt cgagttcagc 240

ggcagggtga acgagatatg gatgctcttc gacaccatgg ccgcgtccga catgtaactg 300

tgcaagctag ccgcttgtta gactaaacca gtgagctcgt atatataaga gtgtcttgtc 360

ttttaagctt ctatgtaagc cgacgaataa tggtagcgta taaacttgcg agcaataaag 420

<210> 1431
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077b05b1

<400> 1431

tcgatttgaa acagaaaagg ccattgtcgt actcttgtac atatgcagca ccgctaatat 60

attgtatggc tgaatgtatt agggagccat gctgacatga aacctgttct tccaatcgat 120

ttcttgtgct gaatctagtt gaaacatgga aaccgcactt cctagtttgt atttgcttct 180

gaggtgcagt gatggagtaa gcagatctgt atttatatga atgaaaaca 229

<210> 1432
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077c06b1

<400> 1432

tcgtaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaggggggg ggccttttta ggggtccaag tttttcctcc 180

cgggcctggc cctgtatttt ttttttttg gggccc 216

<210> 1433
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077d12b1

<400> 1433

tcgttctacc ctagcagaga aaaaaaaagc agaggagagg aagcggaggc gacgatgtcg 60

gcgatgactg cggcggtgcc cttctggcgc gcggcgggga tgacctacat cggctactcc 120

aacgtctgcg cggcgttggt gcggagctgc ctcaaggagc ccttcaagac cgaggtctcc 180

tcccgcgaga aggtccactt ctccctctcc aagtggaccg acgagaagca gcagaagccc 240

actgtgcgca cagatgatga atgaagatca ggtgccatgg tgatgttttg agaagttgtt 300

ggtttatggt caggggctca gggcttaaga acttgaaaat aaattcttgt ggtgacaatg 360

gatctattcc gatactatgt tgttatattt actaattgct ccttttctac ttgatgaacc 420

atgtg 425

<210> 1434
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077e12b1

<400> 1434

tcgcggacgc gtgggcggac gcgtgggaca agctcgtaac gaagggcgcg atcttgctcg 60

cgaaggtaat gaaattatcc gagcagcttg caaatggagt cctgaactag ccgcagcttg 120

tgaagtatgg aaggcgatca aattcgagtt cgagccggta gatactattg ataagtagat 180

aaaactaaag ataaagaaga gaaggtataa ataaaaaaga aacgaaat 228

<210> 1435
<211> 422

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710077f01b1

<400> 1435

tgtacagccc atatgaggtg aaggctaggc tcaagttctg ggcgcaggcg gtggcgtgca 60

ccgtcaagct gtgcagctga tcaaccgcac cgtcaatcaa tccatcccac agactaagga 120

agacgaagcc aactcatact cgcaaggcgg cagcccaatt catcaggcga cctatgcgca 180

cgagcgcacg ccatctgccc gaatcgcgtg ggaattacat tacattgcat caattcatcg 240

ccatcatcac gacaacaagc agaaggaagg gtgcacgcat catattgtgg acttgggatc 300

gcgcctctga tgacaggaag cgatgaagct agccaggagg atgtcgccgg ccatttctaa 360

tgctgcactc acacattatg atttatgaat cactgaattt ccgttcagaa gcaagcacta 420

tg 422

<210> 1436
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710077f07b1

<400> 1436

ggcaaattac agtgtctgaa ctgaaataca tggaggagat ccagaccatg caagttgaaa 60

caactgaaaa gaatgaagca cttacaagca agatgcagga gcatgcaaac ttagtccatg 120

aaaaagatca gttggagcaa caattgctgg aagttaggaa ggaactggag gctgcttacc 180

gtaccatagc taaccaggaa gagcaagctt cagtgaggga gataaagtgg gatgcgttta 240

agacgtattc agcggatcaa ctagaagctg cacaaaaaca cgctgcagag ctggaagtac 300

aagtatcagc tcttaatcag cagctgcaag aagctgagat ccatt 345

<210> 1437
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710077f10b1

<400> 1437

tttaaaattt atctgatata gaacactcat atcgataaaa tggtttgaac tatttactag 60

aaaaaaaaag ggggcaccct gccctttttt aaccaatgcc gaatcgacga cctatgtata 120

aaaaagagaa atttttggga tttg 144

<210> 1438
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077f11b1

<400> 1438

ttctcggacg cgtgggcgga cgcgtggggt gccattgcag ttttgtcaac tctgacattg 60

ctttgggttt tccttctcca tttgtctttc ttgttcctaa gaatatgtgt atgtccatgt 120

tcatgtaaca acatggctcg tg 142

<210> 1439
<211> 64
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077g01b1

<400> 1439

aaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa 60

aagg 64

<210> 1440
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077h04b1

<400> 1440

tcggttccgc ttaactttgt acgactatta catatctatc tgaatttgta actgtttttt 60

tttgtcggag ggaatttgta atcgttagtg gcatgtatta ctaatgtact gtcaaactat 120

actctccttt attttcatgt tacagccc 148

<210> 1441
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077h06b1

<400> 1441

tcttggacgc gtgggcggac gcgtgggcaa gagatgcagc ccttcagtcc agaaatacag 60

agaaccaaac agggcgagct gttcccaaca attccgaagc ttcgtctagt tgtcacactg 120

tgcagaagag atcaggacca ctgaagctca ctcccggcgc gaagcatata ctggtgccaa 180

gtgatagcac gcatggcgac tctatgcctg tgtactcctg tttatctttc ggaagtagga 240

gcggaaatgc tgcagggtct cagaacaaag gagcatgata gactttgtga aatgctgttt 300

aaccttcaga agtaggagcc ttttgaaaaa tgtttacatt tttctatctg taaaactgga 360

ttgactatcc tgtaagaata gttaccata 389

<210> 1442
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077h10b1

<400> 1442

ttgcggacgc gtgggtttga cttcaggcct gggatgatca gcatcaacct tgacttgaag 60

aagggtggca acaggttcat caagacggct gcttatggcc actttggccg tgaggatgct 120

gacttcacct gggaggttgt gaagcccctc aagtttgaca aggcctctgc ttgagaggtg 180

ggtatgaagg agtctaatca ttcctgctgc tgccgctggt ggttgtatct tggataattg 240

aattccttct ctttagaagg aagcagggtt tcaacatcgc cgtggacacg ctgaattggc 300

gtctagtgat tggtattttg gtatggaata caaaaatatg tgct 344

<210> 1443
<211> 100
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710077h12b1

<400> 1443

tttctttttt attgttgcag caatatccgg tggatgtttg tcaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaggg 100

<210> 1444
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078b03b1

<400> 1444

aggcagggtg ggtgctcacc tgccacgcct acctcaagtc cgacatcgtt atcgagaccc 60

acaaggagga ggagctcacc gcataagctg ccatacctat ctctctttgc aagaggatcg 120

agctgatatc atattatctc ctacagtatc atgcatgcat ggacatcgcc agatcgatac 180

accgattgtt ttgtgctcga atgaattgct cgatgcatgg 220

<210> 1445
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078d09b1

<400> 1445

tcgatcgccc acgcgtccgc ccacgcgtcc ggccgcgcgt cttcccacgc gtccg 55

<210> 1446
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078d11b1

<400> 1446

cgctcttcag tttagttgct aaactggtgg tagtctttca gtagtcagta cttatgatta 60

cctataccaa attttcctga cccgtatgct tgcgttgttt tattgagact ttgagaggct 120

accgttgttt atggtgtact caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaataaaaa 180

aaataaaaaa aaaaaaaaac aaaaaaaaaa aaaaaaaaaa aaaggggggg 230

<210> 1447
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078e02b1

<400> 1447

tgttgtgaga gtatacgtga ataacgagcg tctgatctga tggagtcgag caagggtgcg 60

tgtgcgtgtg cgtgtggttt gcttgctcgc tctcccatgc tctgcccatg gtgtccttgt 120

gtgtatgtgt gtgtgcatgt gtccctgtaa ttgcttcatc tatccccact atggatggag 180

tgatgaatat gtaagaatga aagatttacc taattaacta ctcctaa 227

<210> 1448
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078e08b1

<400> 1448

tttgttcggg acgatgttct tggaagcgcg cacgtggaag tctagtttgg cgacgtggtg 60

catcagatcc aggtggctgt ggagtcttgc cctgtgaact gcatccactg ggttgggagc 120

gaagagctcc cggtgctgga gttcatggca cgtccacagc ccaaggaagg gcacggcgtg 180

ttcggcggcg ggtgggagag gcctaaggac gtgttcgcgg cggccaggaa cttctccagg 240

aaactcgaga agcaggagcg gcaggaaagt tccaggggcg caaacggggg tgaagatatg 300

gaggctgaaa cggcagctca tgccgaagcg agacgccacg cggggcag 348

<210> 1449
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078g09b1

<400> 1449

tttcgttcgc ccacgcgtcc gttccattgt cttcttgttc ttggtgaact tgatgttctt 60

gtcgagcttg tggaggagct tgccgagctt ggggaggagc ttgtgaaact tgacgatgca 120

cgtgagtttg atatattcgt gcttgaactt catggctaag tgctctttgt tgctcatga 179

<210> 1450
<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078g10b1

<400> 1450

ttggtcgccc acgcgtccga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aggggcgg 138

<210> 1451
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078g12b1

<400> 1451

tgtgttcgcc cacgcgtccg cccacgcgtc cggccacgcg tccgcccacg cgtccgccca 60

cgcgtccgag gttt 74

<210> 1452
<211> 128
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710078h11b1

<400> 1452

tctgtcgcgg acgcgtgggc ggacgcgtgg gggatgattg ttttgttttg attttccatg 60

gcttggattt taattatgtt tgatggtgtt tttttaattc gtatatcatg ttgtgttgcc 120

gttaaaaa 128

<210> 1453
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079a03b1

<400> 1453

tcgtcatgcg tacgcccacg cgtccgtcca cgcggtgcgt tatgcgttcg gcga 54

<210> 1454
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079c09b1

<400> 1454

ttctgtccac gcgtacgggg cagtccatag tcccatccag actgccggga ccactggact 60

gtaccaatgt cagagcagca gattactggt actaccatca ctccgcactc cgcagagatc 120

acggggtcca gcgtgagcgc tcggcgcagc atatcggcag ccatggtcac ggtggttctg 180

accctgctgc tgctggtgct cctcccggtg cgccatgctg tcgccacggc ggacggcgac 240

tcgcacccgg gctacgcgga cacggaggcc gacacctgcg gggcggctcc cggtggctct 300

gcccgttccg gagga 315

<210> 1455
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079d01b1

<400> 1455

tttttacgcg tccgcccacg cgtccgctcg caatgcaagt ggtggcatgc ccacaggttg 60

aatatgtctc aatggaggac ataccagaga gtgttgtcag caaggagaag gagattgaga 120

tgcagaggga ggacctgcag tcgaaacccg aaaacatcag ggagaagatc gtggaagggc 180

ggatatcaaa gaggcttgga gtgatagccc tcctggagca gcccttcatc aaggatgaca 240

gcaagacggt gaaggatctc gttaaggaga cgatcgccgg cctgggggag aacatcaagg 300

tacggaggtt tgtcaggtat accctcggcg agaactgata aatgagacag tgacctccgt 360

tacaatccat ggcatcagga gtcgggcaca ttttgattca tcg 403

<210> 1456
<211> 151

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079d04b1

<400> 1456

tgtttggctc agaagttatt gactgcctgt cgtttccttg aacagtcctt gggaactgta 60

tgcatctgga tctgttggac tgcttgtatt tggaagtttt cctcaagttt cagtactgat 120

gaattttact gtcttgatac aatttggcaa g 151

<210> 1457
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079d06b1

<400> 1457

tgtttacgcg tgggtttttt ttaagcaagt aactgcaggt agatgaagcc ttcgactgtt 60

cttcagaaac agagcaacta ctctctcaaa aagaaaagaa aaaactcaaa agatatactg 120

gcatacagct tgctcgtaca tgcatctatg tttgtttcgc ttacataaca atttctagtg 180

cctcgcttca aacttcgaac ttcaagagag tgaaagaaga gagagac 227

<210> 1458
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079d08b1

<400> 1458

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg 120

ggggcctttt tgggggtccc aagtttactt ccccgggctt gcaacgtaat actttttttt 180

tggggccccc taaattaaat ccacgggccg gggttttaaa acggcgggac ggggaaaacc 240

cggggg 246

<210> 1459
<211> 164

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710079d10b1

<400> 1459

tactggttga atttgggtct tgctggggtt gtaatttgat caggagagga aatacctgca 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag aaaa 164

<210> 1460
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710079e09b1

<400> 1460

ttcttgtcca cgcgtccgcc cacgcgttcg ggatgagatg gtgttgctgc ttaggctggt 60

gctggcgtga ctctgagtag tacgacctca tcgtgtgcgc ggctaaggag taccactact 120

acttattacg tataaaacta taaattataa cctgcatata tagagagagt ttgttgttcg 180

taccatctat gaacttcatt gcgaaccaag tttctctggg cctggaacag cattcgacat 240

gcttttcctc gtctgaatga tcgactaaat aaagcggcaa gtttgtaacc cctgcttcta 300

cttcaggctt ggagaataac tcagcatggt tttacagttt ggattgtcga caagataaac 360

cgacttgtac tcatgtgcgc atg 383

<210> 1461
<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710079e11b1

<400> 1461

tttctgcagg ttgcgaggaa tccggcaagg cctaaagtgc aagttgaagt aaccgatata 60

catgtcatgt tagtcacatt tgtcggcggc tctgctttct cagttttact tctcgttcta 120

ctcatatata tgtgaatata tgagcatatg tatgtaagca cctaccaatg taggtcgagg 180

aggatgcata tgagaattat agcaccggct atacatatac atatatatta tatgc 235

<210> 1462
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079g02b1

<400> 1462

tttgttatat gccttttttt ttcaaaacga actgccatat gccctccttt gtaagcctgt 60

gcacgtacta tttcaataga ctggaatac 89

<210> 1463
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079g05b1

<400> 1463

tctgttgaag tacctcggtg gctccggcga ccccgcctac cccggcgggc ccatcttcaa 60

cccgctcggg ttcggcacca agagcgagaa ggagatgaag gagctcaagc tcaaggagat 120

caagaacggc cgcctcgcca tgctcgcctt cctcggcatg tccctgcagg ccatcttcac 180

cggcgtcggg cccttccaga acctcctcga ccacctctcc gaccccgtca acaacaacat 240

cctcaccagc ctcaagttcc actaggcgaa atcgatccga tccgatccga gcatcgtcgt 300

cctgtgcatg gtacccgtcg tcgtgggaaa cgtgagcgtg cgagaggtat acatgcgagg 360

gtgggtgtaa aatgtaaatt tgtacgcgtg ctgcgtgcat gcttgtaata tttata 416

<210> 1464
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079g07b1

<400> 1464

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gcgctccacc tgcttcacaa gcacctgggc gacttcctgt cgacggggtg cgtcacagcc 120

aggcagggcg tgctggccaa tgagctgctc ggcaagctgt atgcgcaggt gcggcctaat 180

gcggtggcgc tggtggacgc gtttgactac acggaccact acctggggtc ggtgctgggg 240

cggtacgacg gggacgtgta cccggcgctg tacgaggagg cgtggaagga cccgctgaac 300

gagacggtgg ttcccgacgg gtaccaggag cacctccggc cgctgctcaa gcagcagctc 360

aggctgtcca gactatgata c 381

<210> 1465
<211> 70
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710079h03b1

<400> 1465

tggacgcgtg ggcggacgcg tgggaaaaag gaggaattat aaaaaaaaac accgagtgca 60

gccagactag 70

<210> 1466
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081b02b1

<400> 1466

catacttcta tgttctgaga ctgtttgcat tgtatgctga ttgttctgca ctctgttctg 60

cactctgttt gcattgtatg ctgattgttc 90

<210> 1467
<211> 67
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081b04b1

<400> 1467

ttgtaacacc gcggcaggaa aagaagaaaa taaatagagg aatctttagg gtacgagacg 60

tatcctt 67

<210> 1468
<211> 97

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081c07b1

<400> 1468

cgcgagaaag catgctcgta tgtgaatgca attggtggct atgtatatgc acatgcacat 60

aatatattta tacaatctgt cgactatgta ttcgggt 97

<210> 1469
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081d07b1

<400> 1469

ccccccccgtc cttccccccc ctttcctttt ttttggggcc ccctatttct tttccccggc 60

ccccctttttc ccccccctcgg acctggaaac cccctgggtt cccccccctt ttccccccttg 120

caccccctccc ccttttcccc agttgggttt ttcccaaaag gccccccccc ttcccccctt 180

cccacctttt ccccccccctt tttgccattt ggcccccccc cttt 224

<210> 1470
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081e09b1

<400> 1470

tcacgcgtcc gcccacgcgt ccgcccacgc gtccgcccac gcgtccgccc acgcgtccgc 60

ccacgcgtcc gcccacgcgt ccgcccacgc gtccgc 96

<210> 1471
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081e12b1

<400> 1471

tctactcgtc cggccacgcg tccgaaaaaa tctctctcgg ctccccgctc cgagtcgcgt 60

cgcgtgagga gaaaggaagg gaagccggaa agggttctcg ccgacgcgga aggaggagat 120

ggccgggaag ggaggcaagg gcctgctcgc ggccaagacg acggccgcca agaccgccga 180

gaaggacaag gggaagaagg cccctatctc ccgctcgtcc cgcgcggggc tccagttccc 240

tgtgggccgt atccatcgtc agctgaagca aaggactcag gccaatggcc gtgttggtgc 300

tactgcggcg gtctactctg ctgctatcct ggagtacctg acagctgagg tcctggagct 360

ggctggcaac gccagcaagg atctcaaggt gaagcgtatc acccctcgtc acc 413

<210> 1472
<211> 168
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081f07b1

<400> 1472

tgctcggatg ccgggatggc ccgatgtgaa ttcgccataa gctatagaac ccttttttctt 60

ttaccatttt ctgacgagga attgtactac ccgtgtgatg cataatttga tcgtcctgtg 120

atcaaaagac atcatatata agtttaataa tattttcatg aacagttt 168

<210> 1473
<211> 71
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710081h11b1

<400> 1473

aaatccataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa atttaaaaaa aaaaaaacaa 60

aaaaaccaaa g 71

<210> 1474
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091b09b1

<400> 1474

tgtttggcca acccttcaac agacagtaga gtgaagctat ggttccttgc tagaccaggc 60

tggatgtact gtggtggtgc aaatgtagaa atgggatgat ttttgtgcat agagttgatg 120

acgatggttg tatcagttgt aaaatctaac ggtctggaat ttgagtagtc gttcacaaca 180

aaagtaagta ccaacataca tattttcctg acacag 216

<210> 1475
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091c05b1

<400> 1475

aaaatatata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa 60

aaaaaaacca aaaaaccaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag 120

ggccgcccgc ccaaggggac ccaagctaac acccccggcc agccaacgaa aaagctcttc 180

aatggggccc ccaaaatcaa atccccggcc cgcggtttaa cacccccggg acgggaaaac 240

cccgggcgta cccaaactaa aacccctggc aaaaaacccc cctttcccca gcgggcaaaa 300

aaccaaaaag ccccccccca accccc 326

<210> 1476
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091d04b1

<400> 1476

ccatttctca agccaatcaa gctctctgct ccttcccagc tacatttcca gcaagcaagc 60

cgaagcacta gatcctcgat ggctcgcgtg gcactgctcg ccgtgttcac cgtgctcgcc 120

gcactggcag tggcggagat ggcgtctggg gcggtgacct gcagcgacgt gacgtccgcc 180

atcgcgccgt gcatgtccta cgcaacgggg caagcgtcgt caccctcggc ggggtgctgc 240

agcggggtga ggaccctgaa cggcaaggcg tccacctcgg ccgaccggca ggcggcgtgc 300

cgctgcctca agaacctggc ggggtcgttc aatggcatca gcatgggtaa cgccgccaac 360

atccccggca agtgcggcgt cttcgtcttt ttccccatca acaacagcgt caactgcaac 420

aacctttatt aagttatcta cgagcatcat catcacacca 460

<210> 1477
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091d12b1

<400> 1477

cctactcgtc cgctgatgga gtcgagcaag ggtgcgtgtg catgtgcgtg tggtttactt 60

cgctcgctct ccgcctatgc tctgcccttg gtgtccttgt gtgtatgtgt gtgcatgtgt 120

ccctgtaatt gcttcatcta tctccactat ggatggagtg atgaatatgt aagaatgaat 180

gatttaccta attaactact cct 203

<210> 1478
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091e02b1

<400> 1478

ccctctcgtc cgtatattag caagtggtgg tttggatcat tgcgaatggg tggcgttact 60

ggagaccacc acccctgcgt cacactggac gacgatggat tgcaagctct ccaaagctcg 120

gtccatgaag ggctcgatcg gctctcggag attacgccag gcatcggtct gtgtcgagtt 180

ctgcagggcc gatgaatccg ccgccgctcc aaagacggga gcaggggccg gtctcgagta 240

tctacaccca cccaggaatg atccaaactc cagccggaag aaacagatgt acaagtatgc 300

tttgcccttt gattattctc 320

<210> 1479
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091f03b1

<400> 1479

cccactcgtc cgcccacgcg tccggttctg ttttcaaaaa aaaataaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaggggggg gg 152

<210> 1480
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091g02b1

<400> 1480

cccactcgtc cgtatattag caagtggtgg tttggatcat tgcgaatggg tggcgttact 60

ggagaccacc acccctgcgt cacactggac gacgatggat tgcaagctct ccaaagctcg 120

gtccatgaag ggctcgatcg gctctcggag attacgccag gcatcggtct gtgtcgagtt 180

ctgcagggcc gatgaatccg ccgccgctcc aaagacggga gcaggggccg gtctcgagta 240

tctaca 246

<210> 1481
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710091g10b1

<400> 1481

tcatcacaca agccaatcaa gctctctgct ccttcccagc tacatttcca gcaagcaagc 60

cgaagcacta gatcctcgat ggctcgcgtg gcactgctcg ccgtgttcac cgtgctcgcc 120

gcactggcag tggcggagat ggcgtctggg gcggtgacct gcagcgacgt gacgtccgcc 180

atcgcgccgt gcatgtccta cgcaacgggg caagcgtcgt caccctcggc ggggtgctgc 240

agcggggtga ggaccctgaa cggcaaggcg tccacctcgg ccgaccggca ggcggcgtgc 300

cgctgcctca agaacctggc ggggtcgttc aatggcatca gcatgggtaa cgccgccaac 360

atccccggca agtgcggcgt ctccgtctct ttccccatca acaacagcgt caactgcaac 420

aaccttcatt aagttatcta cgagcatcat catcacacca ggctagctag ccca 474

<210> 1482
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092a01b1

<400> 1482

cccactcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggggccg 107

<210> 1483
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092a10b1

<400> 1483

tacataacac acacaatcat ttggaacgga ccaatgggtg tttttgaatt tgacacgttt 60

gcattaggaa ctgagtctat tgcaaagaag ttggccgagc ttagcaaaaa gggtgtgaca 120

actatcattg gaggcggaga ctccgttgcg gctgttgaga aggtgggagt ggctgatgtt 180

atgagccaca tctcaactgg tggtggcgcc agcttggagt tgttggaagg aaaggagctt 240

cctggagtcg ttgcacttga tgaaggtgtc atgacgaggt cggtgaccgt atgaggctaa 300

gcttcatttg ttgcatctta attcctttca tgtaccgttc caaacctgcc atgttgtcct 360

ccctttttgc tcgtct 376

<210> 1484
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092b01b1

<400> 1484

ccttcttgtc cgcaaaaggc tttcagttga aactactcct aatcaggacc ctcttgtgac 60

caaagggtca aacctgcatc ctttgttggg aattgatgtc tgggagcatg cgtactacct 120

gcagtacaag aacgtgaggc cggactacct gaccaacatc tggaaggtgg tgaactggaa 180

atatgccgga gaagagtatg agaaagtgct tgcatgattt gtccgagtag acagacagta 240

cttcgctcgc tcttgagttc cccgctgttg gatctttgta tatgcagtaa taaaagtggg 300

cactattcca ctgtcgggac cttctgtaca tcgcatagag gcggggtaat gtccaacgca 360

tagaacagtg cctgtccatt ttggtacttt ttactgtgcc tgcgtgacta ataaactcat 420

tc 422

<210> 1485
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092b02b1

<400> 1485

ccctcgtgtc cgcaaaaggc tttcagttga aactactcct aatcaggacc ctcttgtgac 60

caaagggtca aacctgcatc ctttgttggg aattgatgtc tgggagcatg cgtactacct 120

gcagtacaag aacgtgaggc cggactacct gaccaacatc tggaaggtgg tgaactggaa 180

atatgccgga gaagagtatg agaaagtgct tgcatgattt gtccgagtag acagacagta 240

cttcgctcgc tcttgagttc cccgctgttg gatctttgta tatgcagtaa taaaagtggg 300

cactattcca ctgtcgggac cttctgtaca tcgcatagag gcggggtaat gtccaacgca 360

tagaacagtg cctgtccatt ttggtacttt ttactgtgcc tgcgtgacta ataaactcat 420

tcgctagtg 429

<210> 1486
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092b07b1

<400> 1486

ttctcgcgtc cgcccacgcg tccgggatgc agatgctaac aaatttctgt aaagctcttc 60

tatatatgga tttgattggc aggagcagaa aaaaggaaag aaatcttgaa tagggttttg 120

agatttttt ttttaactta gagaagccta gtattaaacc agtggcatct tccttctgtt 180

aacttgcttt tgtttcagag ttagaaaaat gggttttcct gttttgttag tttcgatggc 240

aaaaaaatct gaagttttgg tccgtgtaaa tttctgtatc tattcaccgc agtgacattt 300

aatcgctcat gtagagtttt gctaattgta gtggcagcgc tgttttctca aaaaaaaaaa 360

aaaacaaaat aataacctta aaaacaaata attg 394

<210> 1487
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092b08b1

<400> 1487

tgcctacgcg tccggtgaag ctggtgccgt tcaacccggc gttcgaggac gcgtcggtgc 60

tgtggacgga gagcaaggac gtgggcaagg gtttccgctg catccgcatg gtcaacaaca 120

cccgcctcaa cttcgacgcc ctcaacggcg acaaggacca cggcggcgtg cacgacggca 180

ccaccgtcgt gctctgggag tggtgcaagg gggacaacca gtgctggaag atctggccgt 240

gggccgaggc gcacgccgcc gtcgagtccg gcgccaccat gggcaacaac gcccacgcca 300

tgggcggcgg gccccccgtg cacgccgtgc gcatcttctg caaggccggc gaggactaca 360

gcctcaccgc ccgcaacggc accgtctgcc tcgcccccac caaccccagg gacgactacc 420

agcactggat caaggacatg aggcacagca acaagatcag ggacgaggaa gggtaccctg 480

<210> 1488
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092c04b1

<400> 1488

ttgcgcccgg ttgagtagaa cgcggcgaag ttcaccgggg aacccgccga ccttaaggag 60

cccaccggca acatgttcca gcaggccggc gggcaggtga tgggtgccgc tacgggcgcc 120

agggacgccg tcatgaacac gctcgggatg ggaggagaca aagccgacgt cggcagcgcc 180

aaatgaagac cgcaaagcgc acaggagggc tagcccactt ttcgtttcgt tattccctcc 240

gtattccttt atttgcgttc caagaaactg atctttacgc atgcgtgggt gtaactttgt 300

ccggtgtatg caaagatgct ttgaatctac agacttgcta attctcatct gatgatattt 360

atcttc 366

<210> 1489
<211> 51

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092d12b1

<400> 1489

aaatataaac ccaaaaaaaa aaaaaaaaaa aaaagggcaa aataaaaaaa a 51

<210> 1490
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092e03b1

<400> 1490

ccctcttgtc cgaaaaaaaa aaaaaaaaaa aaaaaaaaat atttttaaaa aaaaaaatct 60

aatttcttac aaaaaaacaa aaaaaaaaaa aaaaaacggg ggcggcccct ctgggggccc 120

cgggcctccc cc 132

<210> 1491
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092e04b1

<400> 1491

cccatcgtcc ggcaactata ccaatctgca acccagataa atatagatgc tattgttgtg 60

ttcaaaattg gcaatgctac aaaacaatgg atgagtgcag agccaagtgt gcatatttac 120

ctccctcctc ttcctctgta cttccatgaa accgggttct tatcatgagc tagaagaaaa 180

atgaataaga tccagacaat aaacaatttg ctatgaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaataaaa 279

<210> 1492
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710092e10b1

<400> 1492

tagataccac atggagcttc tgctactaca caatcagccg cattcttcgg agccaggtgc 60

ttgtaattcc ttgtacttga aagcacgggc tctttacgag gttctttact caaaagtgga 120

tgtgtgaatt gccacgactt atgtgcacca aaattttggg atgcgtagct tctttgaagt 180

ttgaagcagg cgttctttcc 200

<210> 1493
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710092f12b1

<400> 1493

tgctagaccg gccgtcttca gttggatgtt acaattaatg tattagcaaa taagctttct 60

tccttttcca tctaaaaaaa ggctttctcg 90

<210> 1494
<211> 401
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710103a03b1

<400> 1494

ctttgatgca ctccatggcg acaaggacca tggcggtgtg cgcgatggaa ccaccctcat 60

tctgtgggag tggactgagg gcgacaacca gcgctggaag atcgttgcct ggtgaatgat 120

gcacatgcta cagtttgttg gttcaaacag cgcgcgatct taataataag caagtactgt 180

atgtttctgg aataaaaagg atggcgccaa tgtgagcggt atgtctgttt tgtttgggga 240

gttatgtata tggatgaact tgtaatgatg gatttatttg gcctagatta tgtgtgatgg 300

atgcatgaac aaaccagtgc ttattattat gcatgcatat acatgccgtg tgacatgttt 360

gtgaactaca ctgtataata gaattggttt atcccatcnn a 401

<210> 1495
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103a07b1

<400> 1495

cccacgcgtc cgcaagcaga taccgagacc cagtccgcct gctgcgccgc cgccacctcc 60

gcgatgaggg ccaagtggaa gaagaagagg atgaggaggc tcaagaggaa gcgccgaaag 120

atgaggcagc gatccaagta ggcgaacaat gaggagaaag cttaaccttg tgtcactaca 180

ccagtctgtt gggatgacag ggtcttttgg ttcctgatat gtctgggttg ttctgatatt 240

ttggggatgc ccacccttgt aacatgagga taattatatg ctttccttga aggctggata 300

ttcggcttaa gaagtattat cgtctatttt tgattaa 337

<210> 1496
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103b03b1

<400> 1496

cggacgcgtg ggtttccgac cagagcatat ttctcgttcc atatgatctg tgtttgtacg 60

aacataggtt gtggagcatg catatgtaaa ttctagcgaa aaatctatac tgaagtcgag 120

aggggctcgg ggctccgctg ctt 143

<210> 1497
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103b04b1

<400> 1497

tctgtcgcgt gggtttccga ccagagcata tttctcgttc catatgatct gtgtttgtac 60

gaacataggt tgtggagcat gcatatgtaa attctagcga aaaatctata ctgaagtcga 120

gaggggctcg gggctccgct gct 143

<210> 1498
<211> 197
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103b05b1

<400> 1498

cggacgcgtg ggcagatgtt taagaaattc ttttatctcg attcgttttg aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat 120

aaaaataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacgaaaaaa aaaaaaaagg 180

gggggggccct tttaggg 197

<210> 1499
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103c01b1

<400> 1499

gtctggtcct atgtatcgtc atgctcgaat gaaattgcaa cggaaaagtt cagtcatcga 60

tctgatgctc gaatgaattt aattttgctt gtaaatcgct ccgtgattc 109

<210> 1500
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103d11b1

<400> 1500

cgctctatcg tgtacgagtg cctcatcaac ccgctgatgc gcggcctgcc gaccaaccag 60

acggtggtgg acgaaagcct ggagaagctg aagaaggtgc tggaggtcta cgaggcgcgc 120

ctgtcccagc acgagtacct cgccggggac ttcgtcagct tcgccgacct caaccacttc 180

ccctacacct tctacttcat ggccacgcct cacgcggcgc tcttcgactc gtacccgcac 240

gtcaaggctt ggtgggagag gctcatggcg aggccggccg tcaagaagct cgccgcacaa 300

atggttccca agaagccgtg atttgctagg cgggatttcg catcgtggga tccgattccg 360

atcactgatc t 371

<210> 1501
<211> 292
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103e07b1

<400> 1501

tctatttttc cggttgaagc gtgccaacga aatcataggc accactactg aagaaatggt 60

gatgcgagca caacagagcc ctgcttctta actgtcacct caaatgaaat gtttttctct 120

gtctaaaagc acaagccaga actgagaagg catctgctca tcctcaagga acacgttgct 180

ttcaatgtac catctgtacg caatatctta gattctattt tccgacatcg gcgagttcta 240

ttgagtgtaa ctaagggtgc cttgtttagg tccaaaatct ggacatgtta ct 292

<210> 1502
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103f01b1

<400> 1502

tctgtggttc cgtcggggca ctgtctgtac aaaatcttca cggtttgtag aaccgctccg 60

catgtttttt cgcttgaact gagtccattt gatctgttgg gtctgtacaa tccctgtacc 120

tgagtccatt cggagaacta cgttattata aggataatga atcacacaaa ggatttttct 180

ttgtgctgct ttc 193

<210> 1503
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103f05b1

<400> 1503

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aatagggcag gaccgcatct a 51

<210> 1504
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710103g11b1

<400> 1504

gtgttactac tgcttcctca tccaatccgg cttgtgcatt cccgagtgcg caaacctctg 60

cagggtcaac tgcgagtgat cgaccatgca ggaacgcatc gacatgcatg gattcgaggg 120

tgtcgatgag cgtgcctgcg ttgccattgt tatattagct gctctatgta caataagtcg 180

atgccggtca ggctgcatgc atgtattgcg tgcgagtgcc tcgacttagc atttgatacc 240

gtgtttaatt tgctactatt cccttcactc aacatattac atattacc 288

<210> 1505
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104b05b1

<400> 1505

tttaactagc cgcagcttgt gaagtatgga aggcgatcaa attcgagttc gagccggtag 60

atactattga taagtagata aaactaaaga taaagaagag aaggtataaa taaaaaagaa 120

acgaaat 127

<210> 1506
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104c09b1

<400> 1506

cttgtaaaaa aaaaaaaaaa aaaaaaaaaa aggggaaaat aaaaaaaaaa atcaagaaga 60

accaaaaaaa gggccgcggg cctg 84

<210> 1507
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104c12b1

<400> 1507

cctggtacgc acgctatatg tatatgttgt caactataag aaaattggac gctcttgatg 60

at 62

<210> 1508
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104d01b1

<400> 1508

ttgttgattg gtcctgatgg gaagacactg agcagcaata ttgcagacat aatcaatgag 60

cactagtgta ggaagatcac taagctcaaa gtaactgaca agcttctgac acatcttgtc 120

gccatgggga atggcgagcc aaggcatgct tgaaaaactg ttattgaatg attcctcatc 180

actgtccaag gatacagcta caacttcaaa cttctccccc actagtgctg attggtcctg 240

atgggaagac actgagcagc aatattgcag acataatcaa tgagcatggt ttggatgcat 300

gggaggggtt ccccttcaat gcagagaagc tggaaattct agc 343

<210> 1509
<211> 178
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104d02b1

<400> 1509

tccacgcgtc cgtctgatgt ggtggtactg aataatgaac tgtaaagtga aaaacaccag 60

ttgaaactgt aaaaaaaaaa aaaaaaaatt aaaaaaaaaa aaaaaaaaaa aataaaaaaa 120

aaataaaaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aataaaaa 178

<210> 1510
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104d09b1

<400> 1510

gctgagcgca tataatttgt taaaaaaaaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa gaaaaaaaaa aaaaaaaaaa 120

aacaaaaaaa aaaaaaaagg ggggggccct tta 153

<210> 1511
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104e02b1

<400> 1511

ttttacgcgt gggcggacgc gtgggcggct acagaaattt cccccaaatc ttcctccccc 60

cctcctcgtc gtcttcttct tcttcttgcc cggggacctt ccagaagctt ctcgaaccga 120

ccgacaggcc gtgccgcggg cgggtgggcg agatccggtt gcggcggcca tggtgaagga 180

gaccgcctac tacgaaaccc tgggggtcag cgtcgacgcc tccccctccg acatcaagaa 240

ggcctactac gtccaggcca ggctggtgca cccggacaag aatcccggca accccgacgc 300

ggcgcgcaaa ttccaggatc tcggagaggc ctaccaagtc ctaagcgatc cagcgaagaa 360

ggaggcttat gataagcatg gaaaggaggg tctttcccag gataacatgg ttgatc 416

<210> 1512
<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104e06b1

<400> 1512

tttcacgcgt ccgcccacgc gtccgcccac gcgtccggtg gagctcatcc tcatcggctg 60

ggccgagggc cgccggtggg cagacatcat caagcccggc tgcgtcaaca ccgaccccat 120

ctttcccaac aacaagctca ccggcaccga cgtcgggtac cccggtggtc tgtggtttga 180

cccgctcggc tacggcaccg gctcgcccga gaagctcaag gagctccgca ccaaggagat 240

caagaatggc cgcctcgcca tgctcgccgt catgggcgcg tggtttcagg ccgagtacac 300

cggcaccggc cccatcgaca atctcttcgc tcacctcgcc gaccccggcc acgccaccat 360

cttccgggcc ttcgccccca agtaaggaac acgttgggag ttagcaacta 410

<210> 1513
<211> 105
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104e08b1

<400> 1513

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tctttattac tcttttgatt gatttaaggt attcacatat ataat 105

<210> 1514
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104e12b1

<400> 1514

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gggcgcggag atgcacgcca tcctgcacga ggaccccacg ctggcgccct cgctgctccg 120

gatgcactac cacgactgct tcgtccaggg ctgcgacggc tccatcctgc tcaggtcccg 180

tcggggcacg gcggagcggg acgccacccc taaccggagc atgcgcggct acgacgccat 240

cgagcggatc aaggccaggc tcgagacgct ctgcccgctc accgtctcct gcgccgacat 300

catcgccata gccgccaggg acgccgtcta cctgagcaag gggccgtggt acggcgtgga 360

gaccgggcgg cgggacggca acgtgacggt ggccgagtac gctgagaacg acc 413

<210> 1515
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104f02b1

<400> 1515

tttagaccgg ccgtcttcag ttggatgtta caattaatgt attagcaaat aagctttctt 60

ccttttccat ctaaaaaaag gctttctcg 89

<210> 1516
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104f04b1

<400> 1516

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cggacgcgtg ggatcaaagt taagttataa tggatgtccg gttgtct 107

<210> 1517
<211> 124
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104f05b1

<400> 1517

tataatatgt gtatgtccat gttcatgtac caacatggct cgagaaagca tgctcgtatg 60

agaatgctat cggtggctat gtatatgaac ggacgcataa tattatacaa tatgtcgact 120

tttt 124

<210> 1518
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104f08b1

<400> 1518

tctgtaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat 60

at 62

<210> 1519
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104f10b1

<400> 1519

tttttccgcg acttccacgc cgcgcacccc gccgacgcct tctccacctc cttcggcggc 60

ggcgccgccc tcgcctgcgt cgccgcgcag ccccgctccc tcgccgccgg cgggtaccag 120

cggtaattaa cgatcggcac ggcctctcat gaccctcccg aatcgccccc ggcaaccgtg 180

tccggacgac taaggatttc tgtgcgcgca tgcatgcagg atgttctgcg ggctggacga 240

catctactgc gtgttcatgg gcacgctgga caacctgagc agtctgatgc ggcagtacgg 300

cctcaccggc cgctccacca acgaggcgct gctggtgatc gaggcctacc gcacgctgcg 360

cgaccggggc ccctacccgg cggaccag 388

<210> 1520
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104g03b1

<400> 1520

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gaatgatggc agagaatcca aaattggctc taatacgtca attatttgtt g 111

<210> 1521
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710104g05b1

<400> 1521

ttaagacgaa gctgacaatg gcagatgtga tctcccggat gtcatgggat ctgttgcggc 60

tggtgatata gaagggaata cttctgagca ttcttcagaa agaaacatta ttgaagatga 120

ggaggccaag ggtgatattt ctctcatggt atgtgatttg aacaatgatg ttgctgagca 180

gtcttcaccc gtggtatgtg atttgaacaa tgatgttgct gagcattctc ccgcaacaat 240

tgctgtcgaa tctgaggacg cgaaacatga agatacttct gtggatctca aggtagaaga 300

tgatatcgaa gttggcatgg aggaaacttg cgccgctgcg gataagatca gtgatggtat 360

gcggcatatt tcacccgagt ccaaagaggg aaacattgac agctgtgcta tcagtgacag 420

cgctgttccc catgagcc 438

<210> 1522
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104g08b1

<400> 1522

tgctcacgcg tccgcccacg cgtccgggat gttagattag attagctttc ttgactcgtt 60

gactttcttg acttgttgtt gttttcccct gtgccatgtg tataccgttg tgctgactca 120

tagattgtgt gtatcaagga taaaatacct tttacagtg 159

<210> 1523
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710104h03b1

<400> 1523

tggcgctcgg gttcagctgg gcgcacctca tcggcgacgt ggccacggcg acgacctgct 60

tcaatcactg ggcaaagata ctgggcggca agacgccaga cgccgtcacc gtgaacccca 120

ggaacgagcc gcaagaccgc gcgcctgccg acgccgccgt gccgcgctcc gtgaagtcgg 180

tcgggcccat cgaggactac tggtttgtcc ccgccggcgt cgacatggcg ggctactcct 240

tccacgtcac cgagccgatg ctcacgaggc tgcagcagca ggagccagcg gctgccggcg 300

gcgccttcga gctcatctcg gcgctcctgt ggcagacggt ggcgaagatc agggccgcca 360

aggaggtgaa gacggtgacg gtggtgagga acgacatg 398

<210> 1524
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105a02b1

<400> 1524

aatttatata caccaaaaaa aaaaaaaaaa aaaaaaggga aaaaataaaa aaaagaggca 60

aaaaaaaaaa aggggggggc cgatagggg gcccccagct ggcgcccgcg c 111

<210> 1525
<211> 208
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105a04b1

<400> 1525

gtgattaaat tctaaaagaa aagaaaatgg agttgtaaca catactgtgt tcttttagtt 60

tttttttca catgttcctt tgggagattg tggttgtgca tttgatgcat ttttgttgat 120

cgtacaatcc agtttgatgt gtttttgttg taaacttgaa gttggccatt ttgtcattgt 180

gtaagattat tttccaagat tcattcaa 208

<210> 1526
<211> 284
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105a06b1

<400> 1526

ggttcctatg tggagacgcc ggtggccgcc gaggaggccc ttaagacgga ggaggtcccc 60

gtgccggcgg aggccgaggt cgaggcgcct gcccccgtcg aggttgaggc gaccaaggag 120

gaggcgccgg gcgccgctga gacggaggag gccaaggaga ccgagccagt agctgcggcc 180

gagccggagg ccgaggcgcc caaagagcca gaggcgccag ccgtggtcga gacagagacc 240

aaggaggccg tggcagaggc cgagccggcg gtggtcgagg aggt 284

<210> 1527
<211> 71
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105b04b1

<400> 1527

ccctcgtgtc cgaaaaaaaa aaaaaaaaaa aaaaaaggga aaaaaaaaaa aaaaaaagcc 60

ggattactgc c 71

<210> 1528
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105b08b1

<400> 1528

ataaataaaa ataaaaaaaa aaaaaaaaaa aaaaaaaatt taaaaaaaaa aaataatgg 59

<210> 1529
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105b11b1

<400> 1529

atacgcgtcc ggtgtatgtc catgttcatg taccaacatg tttcgagaaa gcatgcttgt 60

atgtgaatgc tatcggtggc tatgtatatg cacggacgca taatattata caatatgtcg 120

actatatacg ttttaatggt t 141

<210> 1530
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105c02b1

<400> 1530

ggttattgtg cggctggtga ttgagggcaa ggaaggtagt cagctcaggg cccggctagc 60

tgctctcagg gaagaggcag aggcagccct gcaggaaggg ggctcgtcgc aggcggcgtt 120

tgcccagttt ctgttggatg tggataatct tgaaaggcag ctcagcgaat gatgcactag 180

tatgtacatt tatgttgcca gcatgttgct agtccaagcc gcccctgttt acattttggt 240

tgtgtggtca ataacttaag tc 262

<210> 1531
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105c09b1

<400> 1531

tcctcgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

<210> 1532

<211> 477
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl5710105d05b1

<400> 1532

cccatgcgtc cgcacaagct aatcaaggtc tcagctcctt ccgagctcca cgatttccag 60

catgcaagcc gaagcactag atcctcgatg gctcgcatgg cactgctcgc cgtgttcgcc 120

gtgctcgcgg cactggctgt ggcggagatg gcgtctgggg cggtgacctg cggcgacgtg 180

acgtccgcca tcgcgccgtg catgtcctac gcgacgggga aggcgtcggc accgacggcg 240

gggtgctgca gcggggtgag gaccctgaac ggcaaggcgt ccacctcggc cgaccggcag 300

gcggcgtgcc gctgcctcaa gaacctggcg gggtcgttca agggcatcag catgggcaac 360

gccgccacca tccccggcaa gtgcggngtc tccgtttctt tcccgatcaa caccaacgtc 420

aactgcaata acattcacta agttatcggt cagcatcatc acaccaggct ctacatg 477

<210> 1533
<211> 145
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105d09b1

<400> 1533

tttgtactcc ttttttttctc tcctgtgttt attatgtgta ctatgctagt aattttgtgg 60

tggagccgct gctactgtgt ttcctccccc tgacttgagc ttgcaagcca ataatgataa 120

tgtttgctac tgaacatata tcagc 145

<210> 1534
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105d10b1

<400> 1534

gtgcccccaa atcggcgacc cctctctctc cgatctccaa tccccacctc gcacacgcgc 60

accaaccggg cacgatgcgg gcgatctcgt cggcggcggg agggatgctg cgggcgcggc 120

tgagcgcggc ggcgcgcctc cgcggcggac acggcgacgg cgggggccgg tggacgacgc 180

ccggccacga ggtgcggccc aaggggtacc cgatgaaccg cacgccgccg ccgccgggcg 240

agtcgcgcaa gtgggaggac tgggagctcc cctgctacgt cacctccttc ctcaccgtcg 300

tcatcctcgg cgtcgggctc aacgccaagc ccgacctcac cctcgagacc tgggcgcacc 360

acaaggcgct tgagcgcctc cagcagcagg ag 392

<210> 1535
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105e04b1

<400> 1535

ctttcgtgtc cgggtgcagc cagctgctga gaaggagatg actgtggtcc tctccacaac 60

caagtcaaag aagcagaaca agcctgctgc gttcacccac aagactgtca tgcgcaagga 120

gttccgcaag atggccaagg ctgtcaagaa ccaggtcagt gacaactact acaggcctga 180

cttgaccaag cctgctcttg caagactgag cgcagtttac cgcagcctcc aggttgccaa 240

gtccggtgtc aagaagaaga acaggcagta agcactgagg ggccaatgag cttgttttgt 300

ggatccgttg gtttatgttt ccagcttttt agatttgttc taagagtatg gaggttgaat 360

atgatgaatg gtgtgctctg catactggcc caagttttct cagtaggttc tatatctgta 420

cccatgacta tg 432

<210> 1536
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710105f01b1

<400> 1536

ccctcgtttt cgcccacgcg tccgcccacg cgtccgccca cgcgttcgcc cacgcgtccg 60

agatcatgtc cggcaggttc acggcgtcgg ccggcggcct gctggagggc tgggcggcga 120

gcttcctccg tggggagagg cagctgaggg acgtgatgga ccctgacctg agctggaacg 180

cgcccctcca tgccgagacc gtcaacaggc tggacggtgt gattcggtcc tgcaccgacc 240

gggaggcgag gcggcgaccc gccatggcag aagtggcgag gcggctgagg gagatcacgg 300

ccatgccgac ggacgccgcc acccccaagg tgtcgcccct gtggtgggcg gagctggaga 360

tcatctccac cgaggccacc tgaagatggc actggagctg caccctgatg gagcatagca 420

tac 423

<210> 1537
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105f10b1

<400> 1537

tgtttcagag cagagcggat aaactcgagg gcagtagatc atcaccaacc atgtcgtgct 60

gcggaggcaa ctgcgggtgc ggatccggct gcaagtgcgg caacggctgc ggagggtgca 120

agatgtaccc tgagatggac gaggggggtga ccaccacctc ccagaccctc atcatgggcg 180

tcgccccctc caagggcacc ccgtcgttcg aggccgccgc cgagaccgga gccgacaacg 240

gcgggtgcaa gtgcggctcc aactgcacct gcaacccgtg cacctgcaag tgatccatca 300

aatcaggaca aggagatggc atggcatgga tggacctaat gaaggagcac tagtagtagt 360

tatgcatggt gtgtgcgttt gtgttctctt tttaattgcc gccgagaata agacgagatc 420

tatcgtatcg tatcgtatcg tatcgagc 448

<210> 1538
<211> 218
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf15710105f11b1

<400> 1538

tcttcatant cgtccgctca aatgttgagt tgtccatcac tggagtgatt ttgtgcaata 60

aagcaaatta accagtcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaggag aaaaaaaaaa agaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aagggggggc gttttaaaaa aataaaat 218

<210> 1539
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105g04b1

<400> 1539

cccatgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtc cg 72

<210> 1540
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105g05b1

<400> 1540

ttgattttgt atctacacat tacatagtac atccctgcag attctttatt ccttgtc 57

<210> 1541
<211> 112
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105g06b1

<400> 1541

ataaataata aaaacaaaaa aaaaaaaaaa aaaaaaaaaa ataaataaaa aaaaaaaaaa 60

aaataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggcgg cc 112

<210> 1542
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105g10b1

<400> 1542

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accaaggaaa ggaggatgtc ttgctgcggc ggcaactgcg ggtgcggcgc cggctgcaag 120

tgcggcaacg gctgcggcgg gtgcaagatg ttccccgacg tggaggccac cgccggcgcc 180

gccgccatgg tcatgcccac cgcctcccac aaggggagct ccggcgggtt cgagacggcc 240

ggggagaccg gcggctgcga ctgcaccacc tgcaagtgcg gcaccgcgtg cggctgctcc 300

tgctgcagct gcaactgagc cggcgcccag gaggccggcc ggcagaggcg agcacgagga 360

tgaggaggac aagcaagcaa gcaccatcac caccagttca ccaccaccca gcgtatcatc 420

accagccgtc gcatgcgctc gcgcgcgcgc gcgctgaata aaataaaacc accgttcgtg 480

ttc 483

<210> 1543
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105g11b1

<400> 1543

cgcttagact ccgacgatgc actctgtggt tgttacagca ggcttgatca ttatgtcgac 60

tacttcacaa ccgaacatcc gcatgacaat aggccacgct ctttctcggt gtacactcct 120

agcagaactg cggtcgtgta tgcccttaca gagtaagaac cagcagcggc ttgttacaag 180

gcaaagagag aactcgagag agctcgtgga ttgtgagcga agcgacgggc aacggcgcga 240

ggctgctcta agcgccatga ccgggagggg atcgtgcctc ttcccctgat gccaggagga 300

tcagatggat aaggtagctc gttggtgagc gctcgaaaga aaatggacgg gcctgggtgt 360

ttgtcgtgct gcacttaacc ctcctcctat cttgcac 397

<210> 1544
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710105h11b1

<400> 1544

cctacgcgtc cgcttagact ccgacgatgc actctttggt ggattcagca ggcttgatca 60

tgatgtcgac tacttcacaa ccgaacatcc gcatgacaat aggccacgct ctttctcggt 120

gtacactcct agcagaactg cggtcgtgta tgcccttaca gagtaagaac cagcagcggc 180

ttgttacaag gcaaagagag aactcgagag agctcgtgga ttgtgagcga agcgacgggc 240

aacggcgcga ggctgctcta agcgccatga ccgggagggg atcgtgcctc ttcccctgat 300

gccaggagga tcagatggat aaggtagctt gttggtgagc gctcgaaaga aaatggacgg 360

gcctgggtgt ttgtcgtgct gcacttaacc ctcctcctat cttgcacatt cccggttgtt 420

tttgtacata taactaataa ttgcccgtgc gcttcaacat gaacatataa atattct 477

<210> 1545
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106a03b1

<400> 1545

ccctcgcgtc cgcccacgcg tccgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaggggggggg ccgtttt 147

<210> 1546
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106b02b1

<400> 1546

ccctctcttc cgcccacgcg tccgctcacc ttcctccaaa gctcaggcat cgacaaatat 60

gggccagagt catttctggt gaacttcacg gcattggttg ttgtgctatt cggtgcctca 120

gttgttgtag ctgctgttgc cccagctcgc cttgaagagc cacagggtta cgctccaatc 180

ccagaacact agtatttgtg aagtgtactg catgcacaga aattcacaaa gtttgctctc 240

accattgtgc ttcgatacca ggatctctcc gatttgaaaa taaatgatct gataagaaaa 300

tgttgtgcat cttctgtgta tatgtaaata catacaagta catattgtcc ttccatgtat 360

catgtataat tgaaacatct atgtaagcag ctattttac 399

<210> 1547
<211> 57
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106b03b1

<400> 1547

tgtatactta ccggatgttg cattatttag attcctaatg ggtactattg gttttgg 57

<210> 1548
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106c12b1

<400> 1548

ccataaatta actgggcaat tctcttcttc ttaattaatc gatgaggcaa aacttttgcc 60

tccgtttcg 69

<210> 1549
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106d03b1

<400> 1549

gctgtgtgca aggacagggc cacccctgag gaagtagcca gctacaccct caagctcctc 60

cagagaagga tccccccttc cgtccccggc atcatgttct tgtctggcgg ccagtcggag 120

gttgaggcaa cgctgaacct caacgcgatg aaccaggcgc cgaacccgtg gcacgtgtcc 180

ttctcctacg cgcgggcgct gcagaacacc tgcctcaaga cgtggggcgg gcggccggag 240

aacgtggccg cggcgcagga ggcgctgctg ctgcgcgcca aggccaactc cctggcgcag 300

ctcggcaagt acaccagcga cggcgaggcc gcggaagcca gcgagaacat gttcgtcaag 360

aactacagct actgatccgt cggcgagctg tctatctaat aatctaccgc atcactgtca 420

gcc 423

<210> 1550
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106d08b1

<400> 1550

tttcgttatt agctataata gcggaagaat ttctcgcatt ttgttggatg atatgaatct 60

agctgctact ttcagcgttg ttgagttgta attgatgctg ttttgcgtg 109

<210> 1551
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106e03b1

<400> 1551

gtgtccatgg aaaggtgtcc aaggacaagg aggagcaggc agagttcaag aagatgtttg 60

atcttattga acagtacaac ctgattggtc acatccgctg gatctctgct cagatgaacc 120

gtgtccgcaa tggtgagctc taccgctaca tctgcgacat gaagggagcc tttgtgcagc 180

ctgctttcta tgaggctttc ggtcttaccg tgatagaggc catgacatgt ggccttccaa 240

cattcgccac tgcatatggt ggtccagctg agatcattgt caacggcgtg tccggctacc 300

acatcgatcc ttaccagaat gacaaggcct ccgcactgct cgtggacttc tttgggaagt 360

gcaaggaaga cccgagccac tggaacaaga tctcgcaggg aggactccag cgcatcgagg 420

agaagtacac ctggaagctg tactctgag 449

<210> 1552
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710106e04b1

<400> 1552

cccacgcgtc cgcggacgcg tgggtctgga gctcgccggg aacgccgcca aggacaacaa 60

gaagagccgc atcatcccgc gccacctgct gctcgccgtc cggaacgacg aggaagatga 120

ggaccagcca ccggccaaga agaagaaatg atctgccttc ctgctgtcag tgtttcagtc 180

cgttagttta tctgctgtct agatgttgat tgagcgggtc tggtacacac cgacctatgt 240

agcttctgtg tcttggtggt tcggtgtctc atagggtaga acattgaact tctaatgttg 300

tttcctgcgt tgtgcaagta gtcttaaca 329

<210> 1553
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710106g02b1

<400> 1553

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a 61

<210> 1554
<211> 105
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107c01b1

<400> 1554

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<210> 1555
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<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107c04b1

<400> 1555

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caaccccggc accgccagga ggtctcctcc tccatcggcc tcgacgaccg gccggagaaa 180

ccatgggcgg ccttcctctt cttcttcttc ctacgggaag gtgacgtat 229

<210> 1556
<211> 114
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107c05b1

<400> 1556

aaaattataa atttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggaa aaaaaaaaaa 60

aagaaaaagg ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggggg ggcc 114

<210> 1557
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107d04b1

<400> 1557

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gcggagaacg gcggctgcgg ctgcacccag tgcaagtgcg gcaccagctg cggctgctcc 120

tgctgcagct gctagatcta tcatcggtca tgcatgcacc gcgcgcatca tatctatgat 180

ctatctacaa tctacttacc atgtaacgcc acctgatcga gggtctttgt atgtatgtaa 240

gcacctgcca gcatgagcag agcaggtgca ctgccatgca tgtaaaccga cccctaaata 300

aaatct 306

<210> 1558
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107d09b1

<400> 1558

tgcccactcg tccggcctcc cttgtcctcc tcccagggct gtacagtaga tgtgtgcgcg 60

tatagaaagg tagcaaaaat aatagtccga gcgtacgatt gttaccgatc ttggcaacat 120

tttagctctt ccatttttgg catggtagga catttgtttc ttttttcttt tccagaccac 180

tgtttcttcc ttttttttttt tctttcgagc cctgttactc cccgtcaagt agacggtgga 240

agatttggtt atcagggttg cat 263

<210> 1559
<211> 66
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107d10b1

<400> 1559

tgtaaaataa aaaaaaaaaa aaaaaaaaaa aaaaggaaaa aaataaaaaa aaaaaagatg 60

atggtt 66

<210> 1560
<211> 136
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107e06b1

<400> 1560

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aaaaaaaggg gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaagg gggggc 136

<210> 1561
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107e11b1

<400> 1561

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tagaatcatt tttcctcatg ggcctgatac agagaacaca catacgtggg ggcccctctg 120

tttcgggggc ccg 133

<210> 1562
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710107f10b1

<400> 1562

tttcccactc gtgcgcccac gcgtccggcc acgcgtgcga ccacgcgacc agaaaggtaa 60

gactgtttat tggaataaca ctaattcta 89

<210> 1563
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710107f11b1

<400> 1563

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cgacatgccg tgtttaattc tctgtaccac ctagctctag tagatgatcc atgaccggac 120

cagtgttgct tcctaattgt gcttgatttc gttgctc 157

<210> 1564
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710107g10b1

<400> 1564

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ctcttcaccc cgatcgcgtt cctggcgtgg ttcccgttcg tgtctgagtt ccagacccgg 180

atgctcttca accaggcctt cagccgtggg ctgcagatct cgaggatcct gggcgggcac 240

aagaaggacc gggcggcgct gagcaaggac gataggtaga tagatcgatt gctgtagtag 300

ctagtaaggt aggaggatga ttgcctgctt gcttgcttgc tgtagaatat atat 354

<210> 1565
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710107h06b1

<400> 1565

tcggccactt gtgcttccac gcgtccggcc acgcgtacga ccaggcgggg ggac 54

<210> 1566

<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710107h12b1

<400> 1566

tcgagactta tcgcctcagc tcagtcctca atgcagaaac agggcacgat ctggaaaaaa 60

aaggggcaga acatgtcgtc ggagaaacag gagacggtgg cggtgcgcgt gctgggcagg 120

tggccgagcc cgttcgtgat ccgggtgctg atagttattg ggctcaaggg cgtggaccac 180

tagctcgtgg aggaggccgc gggcaacaag agcgagc 217

<210> 1567
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710108b10b1

<400> 1567

attaggaaaa caattactat tcattaattg cctgaacaac gtggtcaggc acatcatacg 60

tacacatcgg ctaggactgg agtacagcaa ggagttgaca gttcactcac gcatacggac 120

gcgtgcatac atgtcgcata aatatatatg cacacacagt gtgtgtgcaa ggtacagaca 180

tagacacact actgaaataa cacacacagg caacttcatt ttatttttta gtagctcaac 240

atcgtatgag cactccatca acgtagaaat taagctccac gcaagcgcgt tcatgcatgc 300

acgtaggaag gattatatat tgaactagtt gacattgttg cagttggtgg acatgctgat 360

ggggaa 366

<210> 1568
<211> 188
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710108b12b1

<400> 1568

tgtacgcgtg ggcggacgcg tgggcggacg cgtgggctga cgcgtgggcg gacgcgtggg 60

cggacgcgtg ggcaggatga aggccgcggt cttatatata ggtcacctcg tgagtgtgcg 120

caattaatgt gttaatttgt tctttggtgt gggcgtggag actaggttcc attaattgcc 180

gtgtgcta 188

<210> 1569
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710108c05b1

<400> 1569

ccaaggtgaa ggtgaaggac tgtgcgagcg cgctgagggc caaggcgaag atcgtgtggg 60

ccaaactggc agagaaaacg gaggccgcga cgtcgaggtc gcacgacgag cggcagctgg 120

cgcatgagcg cggcagggcc aaggtcgccg ccacggaggc gcagcttcac caggagaagg 180

tcgcgcatcg ggaggctgcc atggagcacc gcctccacaa gcacgccagc gtcggcggtc 240

acaaccacaa gcacggcgcc cgtggcgtgc actgatatat 280

<210> 1570
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710108d03b1

<400> 1570

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tatggtcact tcagattctg acctgatctg gacaatatcg ctccggcact gagtttttcg 180

atgcatcttc tcgtcagaca atacttctat gagctacgat ggattgatta gcacgtcgaa 240

catcgttgat gaggaccggg ttatggtcgc ttcagattct gacctgattt ggacaatatc 300

tctctggcac cgagcttatg ctaggcagaa cgttttagct atcgccaatt gtctcatcta 360

atttatgtct atgaccacta catccagcag tgacgtgata aattctggcg tgttagaatt 420

tcaagccttg taaattt 437

<210> 1571
<211> 144
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710108e10b1

<400> 1571

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ttgagtactg tcgttaattt tggcttttgg caaaacatgg aagcttctga gactactcat 120

ttttatcctc tgctttggaa tgtt 144

<210> 1572
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710108f07b1

<400> 1572

ggcggacgcg tgggcggacg cataatatta tacaatatgt cgactatata cgttttaatg 60

gt 62

<210> 1573
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710108f10b1

<400> 1573

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atccatgtgg tgaaaactgg aagtgtttgg tttgagcagt ttaccacctg cgtcgatgta 120

ctctgtctgt atggttcatt gtgtccaagc tgacctcctg cttggaagcc agcttgccta 180

aaacctgtcg ctttcaaact aatcgtcttc atctca 216

<210> 1574
<211> 240
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121a10b1

<400> 1574

gtgcttgttc cggagagggt gaagcctaag tacaactacg aggaaatgta caaggaccct 60

cagaagttcc ttacgccgca tgtcccagac gatgagatat actaaagcta gcttgagctt 120

tcgtcaaaca aagatgatgt aatccttagc agtagacttt atctgccgtt gcatttggtg 180

tgatggtgta gctgttgtgt tttggcattt gaccaagcaa atgaaagcac atggaactta 240

<210> 1575
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710121b01b1

<400> 1575

gtgggcccag tctggaccaa aatagcattg aacccaaaca atgtaagttt gagtgagcat 60

ggcaagcatc tctgaagaca gtccgaactc caaaccatac aacaagtgct aaatctcaca 120

cattacaaat attaggacac aaaatgcctg attccataag catcggtttt gaccaaacac 180

tattaagtac taaaccagaa gcaggtaagc caaaatatca ctgagacctg gcaattggtt 240

caagggcttc aatcatcaca acactatttc ctctcagaac caccatccct atgtcggtct 300

tctcatctcc attgacctcc acagtgttgt ccaccaccaa attcatgaac tgatcaaagt 360

tgtattgata aat 373

<210> 1576
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710121c04b1

<400> 1576

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gacaaggaaa cgatggctaa tccatccgtt ggccccactt tagtcatatg catggacggc 120

ttgatttagt tgtcgtacac aaatcgtctt caaaacatcg tctgcatagc agtgctcttc 180

caacttttgg ttatgcgctt ggttatctag tactagtagt atgtggtagt ggcctgtgat 240

ggcctgttgg gactcctggt atgttgcgtt cctaagctgg ttgccgcact tggtgcctca 300

gaacctttga atcctgttag gatgctgctg ttgaaccttt actattaaac catcttaatt 360

gctgcttttc 370

<210> 1577
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710121d02b1

<400> 1577

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cagttgttga cgatgatgtg ctgctgtaag ttgttaacaa aaaaaaaaaa aaaaatttaa 120

aaaaataaat aataataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaag 180

gggggggccgt tttaaagg 198

<210> 1578
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710121e01b1

<400> 1578

ctcgtttatt cttgtgaagt atggaaggcg atcaaattcg agttcgagcc ggtagatact 60

attgataagt agataaaact aaagataaag aagagaaggt ataaataaaa aagaaacg 118

<210> 1579
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710121e05b1

<400> 1579

gggaggtctt gtgctccaag ccgctggttg gccccttcaa cttccgcttc ttgtccaaga 60

atggcatgaa gaacgtcttc gacgaggtct tctccaccga tttcaagatc ggcaaaacct 120

accaaccgga atattgatcc acaccggcac tgcacaccgg ccaagtttca gttgatcaaa 180

atcgtcctaa ttaattaaca cccatgtatg agtcgcgtag gaaatatgtg cctgcatgag 240

tggatagcta gtgaataatt ttaatttttg atgcacatag atatggtagg agaagcaaca 300

acggatgtgt ttgctctccc atgcatgcat ccactgtcga tgcagcagtt ttcttttgtg 360

ttaccgaatg tgtaaccgaa aatgctcaag tttcttaatg atctatggaa gaaaactcta 420

ttcttttgtc ggg 433

<210> 1580
<211> 164
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121e08b1

<400> 1580

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cgcgtcttca acgaggggat gaagaaccac tccatcatca tcaccaagaa gctcctcgag 120

gtctacaagg gcttcgaggg cctcggcacc atcgccgacg tggg 164

<210> 1581
<211> 125
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121e10b1

<400> 1581

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tgtattatat caccacaaca atgtgcctgc tattagcatt aatgagtacc gtatatcttg 120

agaca 125

<210> 1582
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121g11b1

<400> 1582

ctcttccatc gggaaaagac agcggcgcgt agcaaacgaa acacggcgag gccggcgatg 60

gatgtcaagt gccggcgtct ggaggggaag gtggccgtcg tgacggcttc cacgcagggc 120

atcggcctcg ccatcgccga gcgcctcggc ctggagggcg ccgcggtcgt catctcctcc 180

cgcaagcaga aaaacgtgga cgaggcggtg gagggcctca gggcaaaggg gatcaccgtt 240

gtcggggccg tctgccacgt ctccaacgcc gagcagcgca agcacctcgt cgacacggcc 300

gtcaagaatt tcggacatat tgatattgtt gtctccaatg ccgctgcaaa tccttctgtg 360

gatagcatac tagagatgaa agagtcagtt cttgacaagc tatgggatat taatgtcaaa 420

gct 423

<210> 1583
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121h03b1

<400> 1583

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agatgcgttt ctgtgctgta ttaacttgtc gaaagagtat ggagcacacc ttataaacat 120

caatagcaac tgggttttgg gagtccaa 148

<210> 1584
<211> 188
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710121h08b1

<400> 1584

tctcactcgt ccgggactgg aagttgtgtg caatttgtga aactaatttt tggggtcctt 60

gttgttatcc atattccgag ttcatgtgtg aagttctttt tgtagaaatg gtacctttgt 120

aagtcatttt gttttatagg agtgacttat tcgtcacagt aaagaatgtg tgactttcaa 180

aataaaaa 188

<210> 1585
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710122b07b1

<400> 1585

cccatgcgtc cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaggggggg ggc 143

<210> 1586
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710122b08b1

<400> 1586

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gaagatgtct tgctgcggag gaagctgcgg ctgcggcagc gcctgcaagt gcggcaacgg 120

ctgcggcggc tgcaacatgt accccgaggt cgaggccgcc ggcgccaccc tcctcgtcgc 180

cgccaccgcc acccacaagg cgagctccgg cgggatggag atggcggcgg aggatggcgg 240

ctgcggctgc acccagtgca agtgcggcac cagctgcggc tgctcctgct gcagctgcta 300

gatcattgat catcgatcat gcatgcaccg cgcgcatgca tcatatctat gatcgatcca 360

tccatccatc tagtaccatg taacgctacc tgatcgaggg tctttgtatg ta 412

<210> 1587
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl5710122d02b1

<400> 1587

aaaaaaaaaa aaaaaaaaac aaaagaggca cctaaaaaaa aaaaacagaa acacaaaaaa 60

acaacggggg ggcctgttaa aagccccaag ctacccccc ggggggggc agaacaaaac 120

ccctttttgg gggcccccaa aaaaaaataa gggggcgggg ttccccaccc cggggagggg 180

gaaaacccgg ggggtcccca aaaaaaaccc ccggggaaaa acccccctttt tcccaggggg 240

ggaaaaaaaa aaaggggccc cccccaaccc c 271

<210> 1588
<211> 214
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122d05b1

<400> 1588

gtttttcttt atgggcgggt atgcatttct attcttcatc cacctggtga tgatcccaac 60

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tgtctaccac gctaaaattt tgcttctgtt ccatttcttc tgcttaatgc ctttatctgc 180

tacatttgtc gccatacatc atcaaacatc attc 214

<210> 1589
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122d09b1

<400> 1589

ggagcaacta taggggggct ttaccgttcg cttactcgcc tttcgatgaa ctatgttcct 60

tggtgaaatt tcccacgagg cagtaaaata actgcattgt agtttctgca ttgtatttca 120

tgtgctgagt ttcttcctga tgatgctgca cgtttatgct gtgatgatac ccagcctact 180

gtttttgtc 189

<210> 1590
<211> 129
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122e09b1

<400> 1590

ttcaagggaa taggagggga ttcaccaaac cattcctcgg agatttgcac tcccagttct 60

cttgtttggc ttgtggattg aattaaatat tgagagctgg acaaggaatt catatccttc 120

tgtttggtg 129

<210> 1591
<211> 123
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122g07b1

<400> 1591

tttcatgcgt ccgcccacgc gtccggtttc agattgccat gttcctcttc tgctttatgg 60

agactctgta accattagcc gtccagcaca atgaaatgaa atgaaagggc gttgctcctg 120

tcc 123

<210> 1592
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122g12b1

<400> 1592

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ccctcgtgaa ataaaagctt tcctttacaa gagaacggca ctctgtttta ttttgtcttg 120

tgggttagga agaagcccac tgaacaatct ttaatttcct ttctaccgaa aaaaacatgg 180

acaaaaacat gaagagaggt catggaaagt ttttaattca agtgtttgta attttcgttt 240

g 241

<210> 1593
<211> 67
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122h03b1

<400> 1593

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agaaagt 67

<210> 1594
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122h04b1

<400> 1594

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ccgctccaac ggcgctagcc tcggcagcgt cagcaacggc ggaaggatca ggtgcatgca 180

cgtgtggccc atcgagggca tcaagaagtt cgagaccctg tcttacctgc caccgctcag 240

cacggaggcc ctcctcaagc aggtggacta cctgatccgc tctaagtggg tgccttgcct 300

cgagttcagc aaggtcgggt tcatcttccg tgagcacaat gcg 343

<210> 1595
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf15710122h08b1

<400> 1595

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cctacaagtc cgaggccgcc gaggtcgaga aggtccacta ctcccgcttc aagtggtccg 180

acggaaagca gcccaagccc accatctgcg aagatgataa atgaaagatc cggtgccatg 240

gtgacacagt cctttctacg gacgttttga aaagctat 278

<210> 1596
<211> 247
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001b11b2

<400> 1596

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gtcatcaact tcggccatgg ttaggtatgc agaaaactag atagatgttg gatctggctc 180

catcctgttt tatttgcagc taacctgacg atgtaagtgc gtttgatact cgctctgata 240

catctgc 247

<210> 1597

<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b10b1

<400> 1597

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atgtaataaa agggcagcct cttccgctcg acgaacatgc ggtgattgac ctagcgttat 120

caagttgctt gcagttt 137

<210> 1598
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b12b1

<400> 1598

gcgtccttcc cagttttatg tgaaactgtg tccctggtta tctgcccgat tgccgttctt 60

gtgatggaat gaaacatgta ccggtttgg 89

<210> 1599
<211> 170
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d02b1

<400> 1599

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gtctcaacat gttgcattag ttgtgacatc ttgttttttg tttcggttta cactcaattg 120

cgtcaaagct tcaaagaaaa tcaactgact tgataagatt ttccggtctc 170

<210> 1600
<211> 154
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d05b1

<400> 1600

gtagtaagct gtagttgatc tgggttccat gccttctatg attagtagta atatctgtag 60

tagcagtagc tggttgttca atggttgctt cagtgttctg aatttctgat gggcaaacac 120

tgtgtttgcc gagatatatg aatccagagt taac 154

<210> 1601
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d07b1

<400> 1601

ttctttacgc gtccgcggac gcgtgggtct tccgcctccc tcccggcgcc ccaccgtgag 60

cgcgagcgag gagaccgtcc tagggttcgc gcctccccgc cggtccccgc ccgccgatcc 120

tctccccgcc gccgcccccg aggatcc 147

<210> 1602
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f08b1

<400> 1602

ttttgtaatg taagaatgaa agatttacct aaggaagtac ttttaaatcg ctccttc 57

<210> 1603
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007g09b1

<400> 1603

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gggatacaaa cattttgtga aggtttcaga ttttagttta attttctacg tgtattaggt 120

cttttggttt tccaatgaga tgtgcagtgg tgattgcggc acacacttag aaggtgttcc 180

aacataagct ggaattctgt catacggacg acaaacttgt ataccaggga tgctgtatta 240

tcttgcccat ttatggcaac attagcttgc gtgtttttcc tcttttcctt ttttaaccat 300

ttcatttgtt actagaggat ttggtcggct ttatactagt aaaaactatt tgggggtgcc 360

aatgccatcc tggtccccat taataaagtc acccaaagta catact 406

<210> 1604
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h10b1

<400> 1604

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agtaatgaca tgtgggtctg taaatcaaag ttgtgattat tgtaacattc tatttcatta 120

tacaatgagg catggtgaat caactgagct tgcaaaacat cgaacgagca atcagcaagc 180

ctgagttaag tttgacatcc tcggctagaa cagtacgact caacaatttg agcgatggat 240

ctgcagtgcc tgcaatagaa gatccatcct tgcgtgccat cctgtgttcg gaccaaatac 300

atgtcatttt cttaatgtgc ttttatttat gtttctggaa tgtgggggct tcttgcgcca 360

tgccttccaa acggcgatag ggttcatgtg atgctattac ccggtaattt gtctt 415

<210> 1605
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017h03b1

<400> 1605

gaaagagact ctcctatttc ctatgaaatt ccaagggatt taggagctct gagtcaggac 60

caggatcaaa gattctccta gcacc 85

<210> 1606
<211> 113
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018a07b1

<400> 1606

tcgtgttttc ccagtgtgta tgaatgaggc ttgtagctcc ccttttgcct gatgatttac 60

aggacagtac atttgctgga agagtgaaac aatttgacac ctgattagaa tct 113

<210> 1607
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001c03b2

<400> 1607

tataatttaa aaaaaaaagt aaaaaaaaaa aaaaagaggg aaaaaaaaaa aaaaagttgg 60

aaaaaataaa accataaaaa aaaaaaaaaa gaacaag 97

<210> 1608
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001c04b2

<400> 1608

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caagctgtac gggatgatgc tgtcgcccaa cgtgaccctc gtggccacgc tgctcaacga 120

gctcggcctc gacttcgact tcgtcgacgt ctacctccgc accggcgccc acaagcagcc 180

cgactttctc aagatcaacc cttttggcca gatccccgcg cttcaagacg gggaggaagt 240

tgtcttcgag tcgcgcgcca tcaaccggta cattgcgacc aagtacgggg cggccctgct 300

gccgactccg tctgccaatc tggaggcgtg gctggaggtg gaattcaaca attttaccct 360

tcgtcgc 367

<210> 1609
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001d02b2

<400> 1609

gacgcgtggg gggaccgtgc ctgggaatat aagaaaataa aaataatctg caatacctat 60

gaccacgttt tgctgcataa ccgagattta aataaaaaac cactaaactc aacaacaacc 120

aacataaaaa ccaacctaat ac 142

<210> 1610
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001d04b2

<400> 1610

aaggaagctg gacaatggac aaggcacacg gcggccaaac atgtgaggcg gagacaaatg 60

agacgatgac agctaatgaa gcccccgaga gggagccaat ggactgggac cctgaaggga 120

gcacagacca cgggtccacc tggaaaacta aagat 155

<210> 1611
<211> 510
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001d11b2

<400> 1611

tttcgtaccc gccaccggag tccccttctt cgggaggggg caatcaacac ccaccttact 60

cccactccca cctaccatcc cccgctcttc tacacatcga ggacgaaacg gtggtgaggg 120

agccgggggа ctagctgcta ggcggaggag gagatggagc gagggctcgt cgcattgctg 180

ggtctggggc tggcgcttct tctgctggcg ccctcccgac gtctcgcctc ggccgctccg 240

gtggaggacg gcctcctcat gaatggtgat ttcgagacag caccacctgg cggtttcgtc 300

aaatctgctt cagtttccga gggcgcagcg accccaagct ggatgatcaa tggaacagtt 360

gagctcattt ccgcaagcca gcaccagggt ggcatgatcc ttattgttcc acatggcgat 420

catgctgtgc ggctagggaa tgatgcaggc attgggcagg tggtggaggg tgagaagggc 480

tcatagtacg cgatcacatt cagggccgcc 510

<210> 1612
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001d12b2

<400> 1612

tctgtgcaca ctcccaccaa cacacgcggc gggagcaaag cgcggcgagg cgagcgcgcg 60

cccgcaagaa ggacgggggc ggcgaggaag ggaagcagca accgcagctg gttccggcgc 120

acaagccgaa cctcccctcg cagccagacg tggacgaccc cgccaagggc gggctccggg 180

aagacgtcct cgccgcagag aaaacccatg acatggcggc gctgtacgaa gacatggcgg 240

acgacggcgt gacggaaaag gacgc 265

<210> 1613
<211> 161
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001e03b2

<400> 1613

tcatttcttt tttggcttcc accttccccc cacgcgcggg acctcgtagt cgacgcctgc 60

tcggagatct cgcctcgccc gccggcagca gccatggacg ccgttgactc ctaggtggac 120

cccttcgctg agttcgcaag gacagcgtcc gcctcgacaa g 161

<210> 1614
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001e05b2

<400> 1614

tcctgggact ttcccacgcg aacgttcctt tctccaggat ctcgctggtc gtggagctcg 60

ccttggagcg cacttcggtg ttttttgcgt acgtacgagg tacgcgcttg acacggtcgc 120

tacacccgac gagcacggtg tacgtcgtct cttccaccgg tgacaggcgc cgggcgcgag 180

acactgagcg ccagacgtga gcgagcaggg actggaggga cgagagggtg gctgtggagg 240

tcgccgagcc gacgccggcg ctggccacct cggcgttcgc tctggacttc agcttcttga 300

tgc 303

<210> 1615
<211> 455
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001e10b2

<400> 1615

gctcacacga aacagacaga gacagaggga acaaacaacc cagaacccgc accaccagga 60

caggacacga ggcaaggaaa gggaccgcag gaagagagcc agaagaaacc gacccgagcc 120

tcaacgcgga cgaagccgga acaaacgaca aggcaaaaag ggccacaaac agaaacgaaa 180

acagccaaac aaacgggcgg cggggaaccc acaaaccggg gaaggaaaag aaggaaagag 240

gggccagaga aaaaccaggg ccgaggcgaa aacaacacaa ggagcaccac cgagaaaaaa 300

agcacaggca aagaagaaaa acagcaagaa aacgggaaaa acaccaaggc aaaccaaaga 360

caggcagaac aaaggaaaaa aagaaccccg aaaggggggc ggaaccacca ggggcaggaa 420

ggcaaagaaa aaaaaaaaaa aaaaggggg ccgaa 455

<210> 1616
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001e11b2

<400> 1616

aaaaggagga aggacaagaa agcctcccca acccgggggg ggggagacaa aacattcaaa 60

acgcagcgta cagaaaccag gagacaagaa ccagcgcacc aaacctcaaa caaacaggga 120

caggggggcc gagcgggagg gc 142

<210> 1617
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001f05b2

<400> 1617

ttatttacaa aaaaaaaaaa aaaaaaaaat agggaggatt ttaaaagaat tttgtgtgga 60

tttaaacaaa acactaaagt gttaatgatt catacacttg tcgttattta tgtggtctat 120

ataggccatt gttatattat ggtgggggggc atgttttaag gggacacagt ttgtccgcct 180

tctgctcggt gggagaacat tttgtctgtg gggtcccctc agtctaatcc tggggaggag 240

ctgacacccc gtgtgggggg gaaaaccctg gggctccccg acttaaggtt ttaggaatga 300

tacccctttt cccctgtggg tgataatcct ggaggggggcc caccctatcg tccctcccaa 360

catctcgcat ttcaataggg gtatgggggc cgcctctttt gggggctttt atgggggggg 420

gggggg 426

<210> 1618
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001g04b2

<400> 1618

ttaataccca ggacgtccca cgcgaacgtt taattgtgag cccaactgca tgtagaaccc 60

gggcgcggga atcgtcgact tcttatgcaa tcgacgacca ccacctagct aatcggctaa 120

acatcgaacg tatcgagaca gtcgagcgct gggttaaata attatgatga cgcttgctac 180

tataatgagt gagaagtatc acctcacctg cagccatgcc tataagaatg agcgcagctc 240

ctataattaa ggcacttcaa gaacttgatc tctacggtac tgcacgtata acgaacgtgc 300

gaacctcact gtaaaaaggc cttgaggcgg agtgtgacaa cctcgagccc aatgcccccct 360

taataaacat atcaagtttt c 381

<210> 1619
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001g05b2

<400> 1619

ttcccgggat ttcccacgcg tccgttcacg tctcccagaa atggaaactg tgaccaccag 60

gcatttcgta tggagtgtca ttttttataa cagccaccta aagtgaaaga tgaactgaca 120

agcgatggtc atctgccaac ggacaacagg agactggaac gtgtggtgca cgaaacgaaa 180

agaataactg caagccctgc gccactgcat agatgaacaa cgcaacggca catgctcttg 240

agcatgtgac aaaccaagag cagccaacta tacatcagcg gttgagcgat ctgaacttga 300

tga 303

<210> 1620
<211> 486
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710001g07b2

<400> 1620

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gcagaggact gccgcggcag catcgccact gctccaggat cagcagcaag aaaagcatga 120

agctgctgat ccggtgccgc cgccgccgcc gcgatcgacg ctgtaccagg cgctgacgtc 180

gacggcgagc ctggccaacc tgctccccac aggtacggtg ctggctttcc agctgctcgc 240

gccgaccttc accaaccacg gcgcctgcga cgccaccacg gcgctgctca cgcggatcct 300

cctcgccgtc ctcgcgctct cctgcctcct cgccttcttc accgactccc tcaatggccc 360

cgacggccgc gtctactacg gcgtcgccac cctcaggggc ctctggctgc tcgactaccc 420

gcccggcgcg cncacgccgt cggacacgtt caggtacagg ctggcaccaa tcgacgccgt 480

gcacgc 486

<210> 1621
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001g11b2

<400> 1621

ccaaactttg ggttaccacc ggcgaaccgg aacgaaaggg gaggatgaac caaacaaccc 60

cggcgaccaa gggaagagag cgtgacgaga agcacgaaag ccaaccggcc gaagaaaagc 120

ccaatgcggg caggaagaag cgaaagagga agccaggacg aaagacgaac aacacagacc 180

gtcaccagca acaagacaga aca 203

<210> 1622
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710001h01b2

<400> 1622

tttcaattgg aacgaactat tcagcaaacg cgagtgggga gatgtgagcg tgggagcggc 60

actgtttacg ccgcagcaac tagctggcat aaatgcatgg tgagtactac atctacactc 120

aggagttccc cgcaggtgca aggcatatgc atcatgacgg tgcagcgagc gctcttgctg 180

gtgccgccaa agtttttggg accatgattg catcttcact gatggacaag caagggagga 240

agagcctcct cataacaagc ttttctggaa tggcggcgtc gatgttactc ctgacattgt 300

ccttcacctg gaagggcttt ggcaccttat ttcggcactc atgcctgtgg cggca 355

<210> 1623
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004a02b1

<400> 1623

ttctcatgcg tccgcccacg cgtccgcgga cgcgtgggct acagcaaaag ggaattctgg 60

ctggagaaga gcaccggcat ggattgcatg gcattgcact tgaaagcgta agtgataaca 120

gggatcgatg acaggagata ttgggttcac atgccaaaca cagagtttag gttccagtcc 180

gtggcgtacc tgaaccaaat attcgtggat cgaggtgttc tcgggagatc gactttcact 240

taccggtggg gacctacagc ctttacttta 270

<210> 1624
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004a05b1

<400> 1624

ttttattttc agggaccgga cgagtagtag gccaggattt actctcccgg gcgagtaagg 60

tccgttgaac cagggcgccg tgcctacgca ccaacctcga tcatggaatt ccccg 115

<210> 1625
<211> 205

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004a06b1

<400> 1625

atcttgcatt ttccagcgat cggacgaatg agtggaccat gatttagtca gcacggctct 60

cactgtcggc tgaacctggt gagtccgagc ctgtacacct gccgcaatca tggccataac 120

gcagccatag ttctttcctg gacggactac ataacaaaag atgatactga gtgcctccct 180

tatttcgatg ggtgagcaac tgaac 205

<210> 1626
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004a11b1

<400> 1626

ggcaggactc ccgccggccc gttccggacc ggaatggttg gctcaaccca cgctgtactt 60

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accgttacca cgagaccccg ggagggccga tctctgaagg gtggcaaatc tctgccttga 180

aatataagaa cgtgaattac actttcgtta gtgtttttgg aatcgtgttg gacgcccggt 240

tagattgatg tatatacgca tgctgatatc agagggatat gccaatagtt ttggctagat 300

gggattctaa aaaga 315

<210> 1627
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004a12b1

<400> 1627

cggcccgtac cggtctggat tgcttggccc gacccacgct gtcctttcga gcggacgcct 60

cagtatcata acacatacga ggagcgcctc gagcttttca gctcgctccg ggagagcgga 120

gtgcttgtgc atcacaggtt ttgatagctg ccatacccat tcagagtagc tgccgataga 180

agtccactac agatgacaaa aggtgatcat accttcaata catgtttgag taactgagta 240

tattagtata atggtcgaga taggtaaaaa aggattcggt ttattca 287

<210> 1628
<211> 196
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004b05b1

<400> 1628

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gagccgactg gtaaaaccct gggggtaccc aacttaatat gcatggagca catccctctc 120

ttgccagctg gaaaaatagc gaagaggtct gtaccgatcg ctctccaaac aagagcgcat 180

cctgcatggc gaatgg 196

<210> 1629
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004b07b1

<400> 1629

tttcttagaa ggtcaagaaa gaagagttga agagatcact ttatgcattg tgctctcagt 60

atggaaggat agtggatgtt gtggccttga aaactcataa actcaggggg caagcctggg 120

tggcattcag tgaaattaca gcggcttcca atgctttccg gggcctacag gactttgatt 180

tttacggcaa aaaaatgcgg gtacaatatg caaaaacaaa gtctgactgt tttgcaaaag 240

cagatgggtc ttatgctcct aaagagaaaa ggaagaagca agaggagaaa gctgcttgaa 300

aaaaactgcg aactgaagat ggacaacaac ctggtgctaa tgctcctgtt gccccaagca 360

atggaactgg tcatcaatct tatctttttg ccaagtct 398

<210> 1630
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004b08b1

<400> 1630

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ctagcatgga gagtggtggt ggcaagagga gggcatcgga tgtggtggcc attgccatta 120

caatgctgct gcttctgcag ctgatggcag ctccgcggac ggtcatggcc gcccgcaccc 180

tgcacgtgga ggacatgaat accttccctg tcctgcgctt aaacaccatc gcgagcgaat 240

ttgccaagcc attgctagcc ccattctgta aggatacctg tatttttact tcttgcagtg 300

aatccttttg ccgttgcagg tggcccgact gcgtgaagag ggatgacttt gctagacgac 360

tcctcatgat ggtagctttt ttttttgcgc ttgaagttgt ctgatcgaag cagttgattt 420

ctgactatca ta 432

<210> 1631
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004b09b1

<400> 1631

tcttggcgcc caagaccggc tgccacccca acaagtcctc cccgcggctg gtggacccca 60

agcccgagcc tggcacgccg gtggagtgcc agcccgagca agggcctgaa gcgccggagc 120

aagagcagga ggaggaacat gagcagaagc ctgtcatcgg tctggccgac cccgcggcga 180

tcacgacggt gaccgcggcg gccgatgagg aggaggagag cttcgacttt gggtggttcg 240

accagtacct gacgtggccc cggacggtgc tgaacgagcc ggacgtagac gtggtgccgt 300

cgccggagga ctggtagcgc tagctgcagg gggaggaccc gcttttcgtg gggctgggcg 360

agc 363

<210> 1632
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004b11b1

<400> 1632

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tcatgcgcac tggtactggg tctgctcatg gacagcaaac tccttagcca ttccaccaac 120

atatggatcc aaggggacgt gtgctccaac acccacctgc acctcggcac atccctgagg 180

tccaacagat gcatggggtt ggtgttggag gtattcaaca tccatatgac atgggaagct 240

aacttgtgca agatgctgct ctgtgatctg ctac 274

<210> 1633
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004c01b1

<400> 1633

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gacgggcgca acgcaatggc ggagctgctg cgagcggccg atttctttga cctgcgcgcg 120

gcagcgccgt tcgtggcggc ggtggtggcg ctctactttc tggctgacca gctgtcctac 180

ctccgtaaga aaggcccccc gtcaggtccg tcgctcgtcg tgccgttcct cggcagcgcc 240

gtgcgcatga tccgcgaccc cacggg 266

<210> 1634
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004c03b1

<400> 1634

ttgtgctagc tcacagctca cgagtactac gtacatgtat acgtgttgat cggggcgaag 60

ttagcgtata caagtggcga gcggtaccta gaggcagggg agagggaagc tagagcagtg 120

gtcgtggcca tgggtgccca ggagatcaag tacttctcgc aggcgaagct tggccggcgg 180

<210> 1635
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004c07b1

<400> 1635

tttttgaaaa ggaggaggaa tctagggaat ctaggaataa tgggcgagcg ctctggagga 60

gccagggata caggcacgcg agggcagcaa gggaaggata caatggtggc accgaaactc 120

aagtctcggc tcgttgctta tacagtcccg acgacttggt aaaacattgg tgtgagcaaa 180

atttttagca ttactaccaa tactgttgtt gcaagatggg gtaatactta ataggctcct 240

acctgatttc 250

<210> 1636
<211> 294
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004c09b1

<400> 1636

ttgcgggggg cccttccata cattcatgta agctgtaacg ggtatgcagg aagtcaagag 60

ctgggatgct tgctgttgtt tcaagatgta aacattgtgt agtgacgtcg gaaatgaggt 120

accacttctt atttttgct tctacatata tactcgtata gtatttgtcg agatttttat 180

ccccaagttg tcactgtata ttatatataa atatgtaaca gggaagtgat ttctgtccag 240

aagtgtaaag ggagtatgtt ggactgacaa tatatatata ttattatttt taat 294

<210> 1637
<211> 70
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004c11b1

<400> 1637

tttattaaat ggtgaaccac aacaatagat aagcctaact ttcacaaaaa gaatcaatgg 60

gcggactatc 70

<210> 1638
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004d02b1

<400> 1638

tttcttgcta aacagtaaac agagagctct tcgtgaatga tgtctaggaa gaggaagaag 60

aagaagtgtg gagcacgctg ctgctacctg gtcgcgctct cagcagtgtg aatttccaga 120

agcatgcttg ccgtgccttc ttccgggtgc accggaggcc ggcttgtgag caggggtgct 180

ttagtgatgc agaagaaaaa aggcaagtct tattggcaag ggaaggctac tcctttcttc 240

caggtctccc tctctccatc taaatccgtg tttggaggag ggggctacgg ttagtttacc 300

caccggttta tcgtgtcctt gtgagttgtg gtcattatca tgcactccgt atgtgcttgt 360

aatgtatggt gtccttgaat ttcagctaca taatggccgg ttgagaaagt gaatgggagt 420

gtgttcatgt gagtaaatta 440

<210> 1639
<211> 79
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004d03b1

<400> 1639

tgttttcagt cgctaaggat gatgctgctt tgatgcatat aaaaaaaaaa aaaaaaaaaa 60

agaactaaaa aaaaaaata 79

<210> 1640
<211> 291
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710004d06b1

<400> 1640

cggcggcttc cagcgcctga gtccgttgct cgacccacgc tgtgttcacc gcanagccgg 60

cacacgggat gcccgaggtg cagttagnna cgcggaagct attggtcgat cttgatgaga 120

acgccccctg tcatcgggac tgagtggggg ctggaacgga cattgcggct cgctgagcca 180

gcccatgact aaggatgaac tggttggcgg cctccgctcg ttgggtgtac actgatccgt 240

gatgtaagcc tgacggtgac gaaatgaaga actggcactg ggttgggctt t 291

<210> 1641
<211> 455
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004d09b1

<400> 1641

ttaccaaacc ccgctccaaa atccccaaat cccctctctt ccgaagctac tcagccatgt 60

cggggcgcgg taagggcggc aaggggctcg gcaagggcgg cgccaagcgc caccgcaagg 120

tcctgcgcga caacatccag ggcatcacca agccggcgat ccggaggctg gcccggaggg 180

gcggcgtgaa gcgcatctcg gggctcatct acaaggagac ccgcggtttg ctcaagatct 240

tcctcgagaa cttcatccgc gacaccgtca cctacaccga gcacgcccgc cggaagaccg 300

tcaccgccat ggacgtcgac tacgcgctca agcgccaggg acgcaccctg tacggatacc 360

gtggctgatg agcctctgcg cttgctggcc ggccgaggcg cacaagccct ggctcgcgga 420

caaaaaattg aggagaggaa aaagctgtat tttaa 455

<210> 1642
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e03b1

<400> 1642

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aatggccggg ccggtcgccg gagtgcgcgc cggcgcgctc gcgatctgca tgggcatgta 120

ctgtgaccag gtctctctcg aggatgcgtt cgcgacggtg aactacacgg ttaacaacaa 180

ggtctgtatc ttgaccttcc tgtggagcca taagagggtc catgaacctg gtcgtgaact 240

tgcacctgca cagcaacccg tctagcacct ttcttgggca ccttcgtaaa agcctgccat 300

aatgcctgca tata 314

<210> 1643
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e05b1

<400> 1643

ttctcattaa acacgcaagc cgtctgcccc cgcacggaaa gtgatccgtc ggaggcgacg 60

cattcgtcgg cgagctaaaa cgacattatt cacatctcag tctggggttg cgaattcctt 120

cgggttccgt agtagacgcc ttagcactaa gcgttaccgg aatatgcttt ggaactcgtc 180

tgtacttagg actaagatta gaaccaatag cgctttcacg cagagtcaag catccgttgc 240

aagcttctgc acagtataca gtgggtatat acgatgcctt cggcaataca gctagtccct 300

tttggaccgc gggtggaggc gcattgcacc ggattgagag attaaaaaaa aaaaacaaag 360

tggttttttt cgataaattt aaaagaagaa atgtagagag ctgtaagaag agccctttt 419

<210> 1644
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e07b1

<400> 1644

tgtctttgtg attcaacgag tgctaagctg aaactggcgt gttcctatat cctagaaacc 60

ggtactctga accacttacg tataactagt ataagtattg gactgattcc tggtacttta 120

gtggcaaaaa ccatatggct gaagtttgaa ttgagtagcc ggttgttttg tgttgatgta 180

ttgtttatat aaatatgcac ctgtcttgtg tatatggaca aatgtatgaa tactagtcct 240

gggttttggc t 251

<210> 1645
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e08b1

<400> 1645

tttctttcta gacaggcttc gtttcctccg gcgacggcgg aacgagcgag agagtcctcg 60

gcgcggccga caaccggttg tgggatcgcg cgaatcagtc gtcgccaagg gccgtataac 120

tagcggtacc gcaccgtgcc gcacgccatg gcaggtaata acccaccacc aaagccatgg 180

gaacgtgttg gcactttatc tggtccagcg ccttttaaac cctcatttgg aggcagcaca 240

agtgacgttt ttgaggcctt tgggaccata taatctgggt tagttgtttc tgttgcacag 300

agctgtgctg ctttcaacgt gaacatttca attgcagggc ctgtgtctct gtgttcttgt 360

gttcagcaag gtttctgaaa ttctttatgt gggttttggt tctcgatcct aaaattcata 420

tggaggattt ggtgggg 437

<210> 1646
<211> 67
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e09b1

<400> 1646

aaaaaaaaaa aaaaaaaata aaaaaaaaaa agaataaaaa aaatataaaa gtacatggcc 60

gtaaata 67

<210> 1647
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004e11b1

<400> 1647

tgttttacgg gctggacctg gagctccacc ttgccgcgcg tgatgacaac ggtgacggct 60

acggtaacag gaacaacaac aagaacatgt gcggctgagg ctacggcgcc ggagggcggt 120

gcaacaacag gcggaccgtg gaggcgctga gatgaaccga ctttgcttga cccgacctga 180

ccgatgatta gttgtagagc ggttaacctt gctttaattg cttatatgat ctgcgatccg 240

agccgatagc ttagctcctt gcttttcgat gagcgttgtt gtacatagag ttagcggttt 300

aatccgtgat gttttgatgg gtattaacat catgttttta tttgttggtt gatttaaatt 360

tctttttttct a 371

<210> 1648
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004f04b1

<400> 1648

ttttactag ggtgtcaatg gcgtctgcca ttacaaggct gaaaatgccg tagttcaggt 60

tttggactca gttaacatca cactgaatgc tgaggacgaa ctgaaaaacg ccgtcgggtt 120

ggttcgccca gtgagtgttg cctttgaggt gatcgacggt ttcaggcagt tcaagagcgg 180

agtttacact agcgaccatt gtggtactac acctgatgac gtgaaccacg ccgtcttggc 240

ggtcgggtac ggtgtggaga acggtgtccc gttttggctt attaagaact cgtggggcgc 300

ccactggggt gaaaatggtt actttaagat ggaaatgggc aagaacattg ttgctgttgc 360

tacctgcgcc ttctacccca 380

<210> 1649
<211> 177
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004f10b1

<400> 1649

ttttccttta cggagccacc ccacccacca aagcgatccg tcggaccggc gagcggcgag 60

cggcttgagc aagggagaga tggcggacac cggggaggag actgtgcaag cgtcgcacat 120

tctgatcaag cacgaggggt cctcgcacag ggcgtcctgg aaggacccga tgggccg 177

<210> 1650
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004g02b1

<400> 1650

tttcgtttga gacattcacc taagccggag tcaagtgcag tgattgctgg gtgtagcata 60

tctgcttacc actacctatc atccgtgaca tttgggaccc ttgtattccc tatggtttta 120

tatatgtgct tggtgtcaat aattgattga tttggaacgg tgcaaactgt atgccagaaa 180

gcacgcctgg ctattattat tgtggatcgc atgatacttt taaaaataaa atataaatat 240

atatttttta attctataat atatttaatt ttatattttt tcaataaata gggggcggcc 300

gtttttaagg at 312

<210> 1651

<211> 184
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004g05b1

<400> 1651

acctttgtt tgtgtgggtg tgggtgatat gtgtgtggtc tgtttctagc gggagcgcaa 60

gttttgtggt gtgaaccttt ttcgcgtgaa tgaataatgg tgctgcgtaa aatttcagat 120

ttgttttgct gtatagagtg gaggagcgcc tcctaggaag taagatgtgg tacgccgttt 180

ctcc 184

<210> 1652
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004g09b1

<400> 1652

cgaaggcata cacgcccgta attgttgcct tgaaaaattt ttatttaccc gtcagacagg 60

acggggctga cctatggttc aggatcgaca gcaactccaa tgccatggtt tgagagcttg 120

tttcaagctg cgagactggt aatataatgt ccagtgtggg cattaacttg ttatttcgtg 180

ggaaatagtg aaacatgtgt gacgtgtttg tttgtttgcc attctcattg ttttactgaa 240

catacactct gtcttgtcta ctttagttta aca 273

<210> 1653
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004g12b1

<400> 1653

agcattctac caccgaaccg aacgagtgaa gtgagagctg tgcacgaaaa ctttatcaga 60

aaccatgaag ggcaccaagc tcggggcgaa gctgatcctg caggccgtcc tggacatggg 120

actgctctta cacgtgaacg catatgttaa ccccaagtgc tgcaacaact gctggtacaa 180

ctgggggggcc gacgtgtgcg acgacgccca ccacaagtgt taccaggact gttctgaggg 240

ctgcgtggtg tgcactagcc cctaaaagag gcgctaagcg gatatgaaat ccaccgtgga 300

atgcacctgt ggcggaccct gc 322

<210> 1654
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004h06b1

<400> 1654

ttgggaagaa cccggcaggc tcatctcttt ttttctcgaa aagactactg tgattatcgc 60

acctattaag taaccatgac gtgcagtgtg gggagttatc tccgtgtaaa tacgcagtgc 120

gatgagaacc gcatatggat agttcttgtt atggaccact atttggtgta tgtatactgt 180

tgtgtttgtg tatgagctca agaaagaact gttgaagcgt cttaaaaaaa aataagattt 240

atattttgtt taactaaatt tatacctcat atttttatca tgtttttt 289

<210> 1655
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004h09b1

<400> 1655

cccgtccttc tcaattcgat ctcttccacc aagccacttg agtacgcgac agaagccagt 60

gaatcagtga gcgacaggca gagagctcgg cctcgaccaa gaagaagaag aagaagaaag 120

aagcatggcg gcagctatgg cgggcgtggg tcgcaacatg gtggcgctgc tgctggtgct 180

gaacctcatc atgtacatta ttgtcatcgg ctttgccagt aggaactcta accacttcat 240

taacgggctc accaaccgtc ccggtgtcgg cggcaacggc gccacctttt actttcttgt 300

cttcgccatc ctcgccggtg t 321

<210> 1656
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710004h11b1

<400> 1656

gaccaccggc gatccgggac gtgagtatac tatagttcac tcagctcctc ttatgctgta 60

ggctgaccct gcatgctgtg tgtcgagtca actggttgta gaatcgccgc tgcgaggcca 120

actgtttttt tt 132

<210> 1657
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007a02b1

<400> 1657

ttagtgatgc cgtagtggaa gcgctcccta tggatgctct tgttcatctc gacactgaag 60

catgttcata tctacaaggt cgagtcatgg tccgtgtgga agactaccat ccagagcaac 120

ctgaagtctc tcttcatatt acctggcagc caacacccca aagcaatggg aaggagcaat 180

tgacagaatg gaagagaacc cctcctggtg ctttgggaag cactaccgga gcgtcaaaca 240

gctggaaatt gtcggggcgt gcgaggacga gttcggggtg cccaacgacc tgcatcttcc 300

tgatctgcac cttctcccgc acaacctcag acggctgaaa attagttgtc ctaatctgct 360

gaatgatgaa aaccccatgc cattacttgg gagctggctg acgttcctga atgtgttgga 420

aatagggggtc aagtcataca ctggcgcgac catgacct 458

<210> 1658
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007a04b1

<400> 1658

ggcactggcg cggaagcccg gggtcgtccc acgcgtgttc tctcccgcgc gcctgctaga 60

gcgcgagcgg gggctctaga agaaccaggc gtagctgcgc gcgcatgcaa caaagaaccg 120

gcttcgagag tggcacctaa acttcaaccc acctggggcg ccatgataca acgtggggga 180

ctggcaagac caaggaggta cccaactggc atcggtcctg aagcacatgt caccaaatcg 240

ccacgctggc gtaatgagcg aacgggggac cgaaccggaa cgccggttcc ccaaacagtg 300

gcgcagccct gaatgggaaa atggaaacac gccagggtaa caggcgcaat taagccgccg 360

gagggtgtac aagggttac 379

<210> 1659
<211> 222
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007a06b1

<400> 1659

cttctagcgg accttcgata gggtgcggcc ggattcatta agcatccgga gctgcgggct 60

accttgagag ttacgaccga acactggcga tcgcatggcg cttcgggggg tggagatttc 120

tgtggagaac ctgcggactg aaagatgggc agagtagatg ctttcgattg ctgggggggac 180

aacagagccg ggaaagccca ttgaacggga caaaagaagg gg 222

<210> 1660
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b02b1

<400> 1660

gttgtcgtcg ccgccgaccg ttgttgcgga cgcgtgctcc ttgtcgacga gatgacgaag 60

ctcaccaaga aggctggaat cgttggcaaa tatggtacaa ggtacggtgc cagtctgcgt 120

aagcagatca agaagatgga ggtctcccag cactccaagt acttctgtga gttctgtggc 180

aagtttgccg tgaagaggaa agcagtcgga atctggggat gcaaggactg cgggaaggtt 240

aaggccggtg gtgcctatac catgaacacc gccagtgcgg tcactgtcag gagcacgatc 300

cgtcgtctga gggagcagac tgaagcttga tcgcggtcaa tctgacaaag gagcctctgg 360

attttgtagt tcagacgaga ctcattcgac gcaatatagc ctaaattgac aacatacaat 420

gttatttatc ggcttgttgg ggttctg 447

<210> 1661
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b05b1

<400> 1661

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cgggcagatg gagttcttct atgaccaggc gccagacgcc atgcggagcg tctgctcggg 120

gctctccagc gcggcgtttg cgctgggcaa ctacgcgagc tcggcgctcg tggccgtcgt 180

ggtgcgcgtg acgactaggg gcgggcggcc cgggtggatc cccgacgaca tcaacgacgg 240

acaccttgac tacttcttct ggctgctcgc catgctctgc accggcaact tcgttgcgta 300

cctgctcgtc gcacggtggt atacctacaa gaagaccgct gactaaacct ggcgatcact 360

gtgccgtatg tgctagggta cttctttgat gcaaaaacgt gtaattggga aagcttcctg 420

tgttgcggca aatccttgag gaa 443

<210> 1662
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b07b1

<400> 1662

gtcttttgaa gggctgcacg gtggagccgg tagcttgatc aagtggaacc ctgtggctaa 60

tgtcgatggc aaggatatct ggaccttcct caggaccatg gatgtccctg tgaacaccct 120

gcatgctcaa ggctacgtct ccattgggtg cgagccgtgc accaggcccg tgttgccggg 180

gcagcacgag agggaaggga ggtggtgggg gaggacgcca cggccaagga gtgcggcctc 240

cacaagggta acatcgacag ggaagatcag gcacccaagg tcggcgttaa cggcaatggc 300

tcggccgagg cccgcgcccc agacatcttc cagagccagg ccatcgtcaa ccttacccgt 360

cccgggatcg agaacctcct gcggcttgag aaccgcgccg agc 403

<210> 1663
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007b08b1

<400> 1663

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ctccgtggtg gtatgcagat cttcgtcaag accctcacag gcaagaccat caccctggag 120

gttgagtcct cggacaccat cgacaacgtc aaggccaaga tccaggacaa ggagggcatt 180

cccccggacc agcagcgtct tatcttcgcc ggcaagcagc ttgaggatgg ccgcaccctt 240

gcggattaca acatccagaa ggaatccacc ctccaccttg tcctccgcct tcgtggtggc 300

atgcaaatct ttgtcaagac cctcaccggc aaaaccatca ccctggaggt tgagtcctca 360

gacaccattg acaatgtgaa ggccaagatc caggacaagg agggcatccc cccggaccag 420

cagcgcctga tctttgccgg caagcagctc gaggatggcc gcacc 465

<210> 1664
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007c03b1

<400> 1664

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agtatgaagt cgtcaggaaa tgaagggcat gatgttccaa caattgagac tgccgttgag 120

acgcgaccag tttgctctct gtgccaggat tcggattcca aaagtcgact ctgctgtttg 180

attcgtcttc aggctgccat ggaaactatg atggcagaga ctgttgaaga tggtcagacc 240

ccaagttcaa ttgcagagct cgcttccaag gtactctccc atgtcagttc cacaagctcg 300

ctggagtcgc cggctgttca agttcttgag gataaactcg aggcagaaag acggggtgca 360

gctgcgctcc gggaagaaaa tagcgccctg aagaagcgag cagaaaaagc tgatgtggtc 420

atcgcgaaac cc 432

<210> 1665
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007c04b1

<400> 1665

tcgtttttgc caagctgcaa tcatggcaaa aatgggagct gatcaatcaa aacctgctga 60

ttgtatgaag tcgtcaggaa atgaagggca tgatgttcca acaattgaga ctgccgttga 120

gacgcgacca gtttgctctc tgtgccagga ttcggattac aaaagtcgac tctgctgttt 180

gattcgtctt caggctgcca tggaaactat gatggcagag actgttgaag atggtcagac 240

cccaagttca attgcagagc tcgcttccaa ggtactctcc catgttagtt ccacaagctc 300

gctggagtcg accgctgttc aagttcttga ggattaactt gaggcataaa gacggtgtgc 360

agatgcgctc cgggaagaaa ttagcgccct 390

<210> 1666
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007c09b1

<400> 1666

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ttgcagagaa ggggctggga tgcatcatac tgcaaaaggg gtgggttaca gtgtacaaat 120

atcggggaag aggctgtaaa tctatttgac atgttcaaag atctatcggt tttaaatgtg 180

aaggcaacct ctctgaacct cttaaatgat gaccctgaaa tgctagggta tctcgagcaa 240

attggcgatg tagctcaaga gggtaatgtt ctcatctcac caatggaaat tcaggcatac 300

aagttagacc tacagccacc atcatcacca gaagaatagt atgtcgaaac tgtacgtttg 360

ggccgctttg ccactaattg gagaaaggat ctacttgg 398

<210> 1667
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007c12b1

<400> 1667

tttgtctaga gtgctgctgc tgctgcccca aagaaggctt tatgccaagg aggtagaggt 60

ggacgatgag gaggaatacc acaagttcaa gtcggtgatc aatgatgacg atgacgatga 120

gggttgcgac caggacgagg accacgacca gtgaagcgga caatgcggga gctgctgtgc 180

gagaagcgac ctgagctgtg tgcggtggtg tcataaggag cctatccatg tgcactagaa 240

ttataccaag cttcacttga catcgcgatg taacattacc ttatttttg tgattgaccg 300

gctataaccg atagcgctcc ctgtaggcgc cgctgccggc ggggtgccct tgtgttggag 360

ggtgtatgct cccagcgcct ggggggccct gctt 394

<210> 1668
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d01b1

<400> 1668

tttatcccgc acccgcccac cagagacaca gggcaggcgt ctcaccaccc aggtccagct 60

t 61

<210> 1669
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d06b1

<400> 1669

ggcttctcct actagtctga aaatctctct cacatcgata agagaaggga ggctgcaaac 60

tgttggtgag tgcttgcgcc gagaatatag aatggtttgc catgtgatgc gcggtgactt 120

cagcagagac ttctttgagg gatgcagggc gatacttgta gataaagatc gaaacccaaa 180

gtggatgccg ccaactctgg ataaagtgca tgacggggta gttgcaaaat atttctccaa 240

ggtcgacgat ccacagtggg aagatttgaa cctgccaact agaccttccc atggaagaag 300

aattgttccc aagctctgat ggaagtctca ggctggtcat agtgaggagt aacttatatt 360

agtgtcatgc atataatact agcctaagtt actaccttca tagtgcaaaa aacatagtag 420

tagtgtcatg gaggacttta t 441

<210> 1670
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007d10b1

<400> 1670

ttggcgcgtg ggaaaaaaaa aaaatagggg ggggtttttt aaaaaaagaa gcacttttc 60

aaaaaaaaaa aaataggg 78

<210> 1671
<211> 116
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007e01b1

<400> 1671

ggggaggaat tcatggccca agagacagtg attgggcacc tggggatcta agatgagaaa 60

ctgaaccgcc atatgggcat ggcggagcct aacgaaggac tggaactgct tgtgga 116

<210> 1672
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007e02b1

<400> 1672

tttgtttgtt gcatctttga aagatgattg aggggcaag gttccacaat atgttaggtg 60

gtggtggtgc tggcatcggc ggcggcagag ggaagctgga gaacgagggc aacggcttct 120

acgacatgcc gtattaccac aaggtcgggg agagctccca catgtcggtg gacagcgcgg 180

acaacatgaa ctcgatgaac tacgtcggcg gctcggtcgc catgtcggtg gacaacagca 240

gcgtggcctc caacgagtcc cgcaccgtca tgctcaacca cccgggcctc cgtgatgttc 300

ccacaccaaa ctattcggtt tgcaacagcg tcatctatcc caacaaggct gccgcgtctg 360

tcctcaagga ggatgctttg gctcgggttt tgatggaccc aactcatcca acggagatac 420

tcactaacta cgaggcgtgg accattgatc cggggaagct ggacatgggg gct 473

<210> 1673
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007e03b1

<400> 1673

ttttctcgta cggctcgacg gataagtagc tagcatgatt tccggaagga agggcggcct 60

ctggaagaag gcagtgacca ggttcgtcaa ggccgggctc cattttcccg tcggacgatt 120

ctggcgctac ctaaggaagg gccgctacac gcagagagta cgttcctgcg cccccgtcta 180

cctgggcacc gcactggagt acctcgctgc cacggtcctg gagcttgccg gcaactctgc 240

caaggacaac acgaagaccc gaatcatccc tagccacctg ctgttcgccg gacgcaacga 300

ccaggagctc agcaagctgc tcgccggcgt caccatcggc cacagcggcg tgatccccaa 360

catcaacttc cggctgctcc cttagaagtc ccccgccgcc 400

<210> 1674
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007e04b1

<400> 1674

atacgttttt tcctaccgct catccgaaac gtgagttgac tattattcag tcagaacggc 60

tgctgctgct agttggccct gatcagattg tgcacggaca actggtataa tcatggccct 120

ccattctcat tgtttctatg tagaggacgc tacgaccaaa gagcaactta ctgccccact 180

tcgttcgttg gaacaacaac tgagccctga tgtgaccctg acggggacca aagaagaact 240

ggtgctacgg gcagcacaac tgcaagagga acttgttgcc acgaggtctt agcatgacaa 300

ctcgacc 307

<210> 1675
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f02b1

<400> 1675

gtttcgctgt tcgtgatgct ggcccgggag cccatggtgc ctttcatgga ccggccattc 60

atgaccagca tcgtgttcgc gcacgacaag gagggcacct ctgtgctctt caaggtgctc 120

tccgccttcg ccttccgtga catcagcctc accaagatcg agagccggcc gcaccggccc 180

atccgccttg ccgacgatgc cgacagcggc accgccccga agcagttcga gtacatgttc 240

tacgtggact tccaggcctc cctggccgac ccgcgcgtgc agaatgcact tgctgaggtc 300

caggagttca cgttattctt gcgggtgctc gggagctacc ccatggacat gacacctatg 360

gctgccggcg ttgcctcact cgattccttg tcggcttatt cgtcttcttt gattggattt 420

gatagagtta atta 434

<210> 1676
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f03b1

<400> 1676

tatgatctat aactgaaatg aataaagaag aacaggggg atttttttgg aacatggaga 60

ataataaatg ccttggtgtg ctgtcagggc acacttttag tgtgtagtct ctgacatgcc 120

attgggggg gcctgttctg gggatccagg gttcctgcgc cgggtttgct gcgctttggg 180

ttttttttg ggacccctaa ttcaaatttg ggggcggtgt tttcacaact gctgggccgg 240

gaaaaccccg ggggtcccca agcttttctt cttgtggaga tttccctttt catccaggtg 300

ctgttttgac aataaggccc tctcttttgg cctttctaat gggtggtgca tcctgtgggg 360

gtattgggag ccccctgttc agggcatttt attcggggtg gtggagttgg ttcccccccag 420

gggaaccctt tctttttcca ttcccgtagc cccccggttt tttggatttt tttccttttt 480

tttt 484

<210> 1677
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f04b1

<400> 1677

ttgttgttca cacaaaaaac aaacacaaaa gaggggggatt ttttaaaaaa gcaccgtcga 60

tgtctatggc ctgccccagt tgaggccgct ttcccaacct accggcataa accctggccc 120

cttattaggg ggcggccctc ttgggggtcc caactttcct aacgctgccc tgcaagccca 180

tctcccttct ttggggcccc caaagtccac ttcacggccc gctttctacc accgttggac 240

cggggaaacc ccgggggccc ccccctaat tggcctggga tcacaccccc ctttaccctg 300

ggggctttta atgtaaaggg ccccccccg atggccttcc cca 343

<210> 1678
<211> 164
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f07b1

<400> 1678

tttgttacgc gtccgaccac gcgtccgctc taggggaat gttcccacac tggctctact 60

tacaaaaaaa aaaaaaaaaa aaaaaaaaac aaataaaaaa aaaaaaagaa agaaaaaaaa 120

aaaaaaaaaa tacaaaaaaa aaaaaaaaat acaacaaagg gaga 164

<210> 1679
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f09b1

<400> 1679

tttctaatta ctgactgcat caggcgacca atctgtaaag atatggagca tggtgaataa 60

gaaatgcctt ggtgtgctgt cagggcacac tagaagtgtg aagtcactga catgccattc 120

ttcaaatcct gatcttatta tttctggttc aagagacggt tcttttgcac tttgggatct 180

aagatgtgac ccccaaaccc caaatggtca tggtgaagca tgactcatgt gtcgaattgt 240

tgatggaggc ttcaggccgt ccttctcaag gagatgaggc tggccattaa ggatctgggg 300

tgaaggtcat gttatctctt ctcgtggctc tactgcccac tgcttccact gctgatattt 360

tgagctcttt gatcagagca tgcaccatgg gaagatgaaa ttggagcaaa ccaagccaac 420

ataatctatg tccctttagg aggcgagtgg atgcccgaaa gatgttgggg gcgtgaactg 480

t 481

<210> 1680
<211> 261
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007f11b1

<400> 1680

gtgttttccg gaatgacgtc gcgggagaga ggaagaagat aatgtgtgga gcacgctgtt 60

gctacctgcc cacgctatga gcagtgtgaa taaccaggag catgcatgcc gtgcctgggt 120

ccgggtgcac cggaggctgg catgtgagca ggggtgcaac agtgaggcag acgaaaaaag 180

gctggtgtta aagggaaggg aaggttacgc ctttcttgca actaaagaag aacccatgta 240

aacctgtgta tggaggaagg g 261

<210> 1681
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007g03b1

<400> 1681

tttctcgtgg gcggacgcgt gggcggacgc gtgggatcta tgtattactg ctggggcttt 60

agtccttcgc ttccagcggc ggctcaagac ggctgagaga gtgatgggaa ccgtgaagcg 120

gttcaacttc accaaggggt tcggattcat cttcgcggag gacggcagcc aggacctctt 180

cgtccaccag gactccatca aggccgacgg ctaccggagt ctcaacgaga acgacgttct 240

cgagtttgag gtcataaccg gcgacgacgg ccgaaccaag gtcttcgacg tcaccgcacc 300

aggaggggggc gcgctcgccg ggggatcccg ccctggccac cgctgaggtg accgcggggg 360

tatccgctgg ggtggc 376

<210> 1682
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007g04b1

<400> 1682

ccaccgggac gccggggcgg gcgggggggga tttattaatc accgctgggg ctgctgcccg 60

ccgacgccga ggacggcg 78

<210> 1683
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h01b1

<400> 1683

aaaacggttg ttattcaccg agtcctactg gtcgggggg gaggtttttg aaatgccatc 60

aggggatttc tcccataacg gcgataactt tggaagccaa caaaacgcgg tatcatgggc 120

cgggttcaac attggctgaa gatgcccggt tggacgagta ccgaagcacc ttgcgtggga 180

ctagtcatat tgggggaaga actgaacctt gaggtaaggc tgggtgctgc cagagaggat 240

ctaagccttc gtctagccaa tct 263

<210> 1684
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h02b1

<400> 1684

tcccatgcga tttgttaatg acacaccctg catttgaagc tgcgcgcctt gttcggaagc 60

cgggggcccc ttgctacggc tgagacatag gccaggggag aatcaacagt tcttactcct 120

tggtttgcac ctgtgtgctg ccccgtggct tcaaaccctg ccatgataag cagttaagca 180

cacaacttgc tgaacgaaat gacaaggaac tactgttgtt ggtgtcaaaa caatgatata 240

attgggaatg tgagatcacg gacatcggtc agagaaaccc ctgcactgta agctgcatgc 300

actcgtaccg tcgtacataa cctgtgatgg tgtgagagta tacgtgaata acgggggggt 360

<210> 1685
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h03b1

<400> 1685

gttcttcaca ccatcttaat taccctgaca gagatggttt tgtcttgtgt tagtgaagct 60

cgctcggcta gaaaaaacat ggcggcttcc cgtgcctcgg ctgcactgct tgctgtggcg 120

gtactcatgg tctgctctcc ggcgcctcct gttctggcca ctgacccgac ccagctccag 180

gacttctgcg ttgctgatat aatgaaccct gtgattgtga atgggctcgc gtgcaagaac 240

atgaatatgg ttacggctaa cgacttcttc ttgcccgggc ttaacaagcc tggcatgttg 300

cacgctcacg gctccgcggt gacacccgac actgcgcggc agctgccggg gctg 354

<210> 1686
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h08b1

<400> 1686

tttctaagct catcttcttc tccttgaaat cttttggggt tcatcagatt tggaggatgt 60

cttgcaactg tggatccggt tgcagctgcg gctcacactg caagtgcggg aaggtgtacc 120

ctgatctgac ggagcagggc agtgccgccg cccaggtcgc cgccgtggtc gtcctcggcg 180

tggcgcctga gaacaaggca ggtcagttcg aggtggccgc cggccagtcc ggcgagggct 240

gcagctgcgg cgacaactgc aagtgcaacc cctgcaactg ttaagctgca tgcactcgta 300

ccgtcgtacg tacgtgtgat ggtgtgagag tatacgtgaa ttaccagcgt ctgatctgat 360

ggagtcgagc aagggtgcgt gtgcatgtgc ctgtggttta ccttgcttcg tctcccctat 420

gctctg 426

<210> 1687
<211> 222
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710007h11b1

<400> 1687

gtctttacca cccagagcag agccgcggca ggggggagtg tacacagcga cgggggtcct 60

tttcgccagc gcgctggtgg cgatcccgag ctcaatggcg ctgatggacc ggctgcggct 120

gggccggctg tcggcgggcc cgcgcacgag gacggaggag ggcaacctgc ggcagatcaa 180

gccggggcgg caccgcaact tccaggagtg ggcgaagcgg ac 222

<210> 1688
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017a02b1

<400> 1688

tgcgggatac ccgaaacacg ggatttcttt cgagggtccg gagcgagagc tcaccgggac 60

ctagacagca ccgaacttgc ttggggcgag gcctgacgag ttggggcacg gacatgagag 120

acagtcatgg gccctttgac ccaggagtcc actgtgttaa aagtgaacac tagagacaaa 180

ctggaacaac agcttaacgc ttagctgggg gaacaactga acatttatag ggagactggc 240

cgggaccaaa gataaactga aaatacgagc ggcagaaaca aaagaggagc tcgaagacac 300

acagactaag aacggtaaca accgaggtgg taca 334

<210> 1689
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017a05b1

<400> 1689

ggtccggcct ttgcgggtgg ccctaaacgc gggttggttt ccggcgcccc gacgcgtgag 60

ttcaccagga tacatgcaga aaccgatgcc gctgatgaaa cagccgcgca gagtaagtgg 120

ccaacaacac ggcacaggag gacctgagag c 151

<210> 1690
<211> 52
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017a07b1

<400> 1690

gagtcctttt aatattaccc ccgcgtcgct ggcgttccgg gatgggcttt tt 52

<210> 1691
<211> 485
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017d02b1

<400> 1691

gatggatttc tatgaaagga tgggtgatac attagctatc cagtacggtg gttctgctgc 60

tcacaacaag atcttctgtg agcaaagagg gcagtggaag gcagcaaccc aatcccagga 120

gttccttcga acccttcaac gttactacaa taatgcttac acagatcctg agaagcagga 180

tgctataaat gtattcttgg gtcatttcca gcctcaacaa ggcaaacctc ctctgtggaa 240

gttggactca gatcagcatt acaatatcgg ccggcaagga actttaagtg aagaaactgg 300

aagatatggc cgtgtgggaa taagcgagtg gtgcatgtac cacttaagtg gggcactagt 360

gactgcatgg tgcctacatg tgatgtgtgc ttgtgggaat atttctataa gcatgtaatg 420

gttcgtctgt gttaacgtga acacacgtct ccgtgtgatt tctattgtca aaacacctac 480

atttc 485

<210> 1692
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017d05b1

<400> 1692

cccgctggat gcggacgccc agcgcgaagg caacaacgcc tctgcccgat acccgaaaaa 60

caggtttact tccggcgacc cggcgcgagc agccaccatg agtcagacag caccgccgaa 120

gccgctggca gaccccgagg agcccgcgac cgaacaacag gcgaaaccat ggcacctacg 180

gggccactgc acactccgcg gaggagccca acgacgaaag atgaacagaa tggcccgcca 240

ccgccccgca gggagaacac accgacaccg cgacgaaagc ccagacgggg aacgaaagaa 300

gaaccggcgc ctccgagagg cagacctgaa agaggagccc gacgacacga ggcccaagct 360

cggcactggc cgccgaccaa caacgccggg actgggaaaa ac 402

<210> 1693
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017e09b1

<400> 1693

ttgtttttct tgtgcatagc ggttctacag ggggggatgt ttttttagc acccatcctt 60

<210> 1694
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710017h10b1

<400> 1694

gggcgaggca taacgcctct gcccgtaccc gaaaaaatgg tttccaccgg cgcccggccc 60

gcgaggggggg atgattagac acaccgctgc tgccccggct gaccctgcga gatcgagtcc 120

gcccaactgg cgaatcacgg ccctccgggg ccactgttcc tctgcggagg agtccatgac 180

taaagaagaa ctcgattgac agtctccgat cgctgggaga acaactgaac cgcgatgtca 240

cctcagacag gtacgaaaga agaa 264

<210> 1695
<211> 68
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018a05b1

<400> 1695

cgggacgggc ggggtagagg cacctaacgc gcggcaaccg gccggcggac cacaacggcg 60

cgcgcgac 68

<210> 1696
<211> 218
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710018a06b1

<400> 1696

gtgcttccag cgngaatgac cgaggccagc gggggggcct tatgcaagaa gacctacagg 60

acagcacatc tgatggaaga gtgaaacaac ccgacccccg agcagaacca aggccctcag 120

agacaaaaga aaccctggag aagccagcag aacaaaaaac aaacaaacca ggggcggccg 180

acccagggaa cacaagctcc acacccacgg gcaaccga 218

<210> 1697
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018b01b1

<400> 1697

tgtctgttgg atgcttgctt ctaagttgaa ttctaagcga cagggaagag atttggtgca 60

gctgctatgt gctccatatt ggaaattggg attggcttgt tgattaatag tagtactact 120

tcttagagga gattacaaga actccttacc gtcatgtttg tatgttcaga tgattggtgt 180

acctttttcgc attaaaaaag atgtttgttg taatgcctaa aaaaaaaata aaaaaaaaaa 240

aaaaaaaaaa aagaaaaaaa aaaaaaaaaa aggcaaaaaa aaaaggaaac aaataaaata 300

aaataaacac aaaaaaaaaa aaaaaataaa agggggggggg ccttttttagg ggtcccaagt 360

t 361

<210> 1698
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018b02b1

<400> 1698

gtctttcgta tgctcgcttc taagacgaat tctaagcgac agggaagaga tttggcgcta 60

ctgctatgtg ctccatattg gaaattgcga ctggctcgcc gattaatagt actactactt 120

cctagaggag actacaagaa ctccttaccg tcatgtatgt atgactcaga ccattggtgc 180

tcctttccgc attaaaaaag atgtctgtcg tattgccct 219

<210> 1699
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018c06b1

<400> 1699

ttctttctcg cgaaaatgtc gactgaagtg gctgccgctg acatcccggt gcctcaggtg 60

gaggtagccg ccgacgccgc cgttgacaca ccggcggcga agccggccaa ggcggccaag 120

gtggccaagg ccaagaagtc cactggcccg aagaagcccc gcgtcacccc ggcccacccg 180

tcctacgccg agatggtgtc ggaggcgatc gccgccctga aggagaggag cgggtcgagc 240

accatcgcga tcggcaagtt catcgaggat aagcacaagg cgcaccttcc ggccaacttc 300

cgcaagatcc tgctgaccca gatcaagaag ctcgtcgccg ccggcaagct gaccaaggtc 360

aagggctcct acaagctcgc caaggccccc gccgacgtca agccc 405

<210> 1700
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018d05b1

<400> 1700

ttctttctcg cgaaaatgtc gactgaagtg gctgccgctg acatcccggt gcctcaggtg 60

gaggtagccg ccgacgccgc cgttgacaca ccggcggcga agccggccaa ggcggccaag 120

gtggccaagg ccaagaagtc cactggcccg aagaagcccc gcgtcacccc ggcccacccg 180

tcctacgccg agatggtgtc ggaggcgatc gccgccctga aggagaggag cgggtcgagc 240

accatcgcga tcggcaagtt catcgaggat aagcacaagg cgcacctccc ggccaacttc 300

cgcaagatcc tgctgaccca gatcaagaag ctcgtcgccg ccggcaagct gaccaaggtc 360

aagggctcct acaagctcgc caaggccccc gccgccgtca agcccaagac ggcgaccaag 420

aagaagcccg ccgccaagcc caaggccagg cgccagccaa gaagacggcc gccaagtccc 480

ccgccaaga 489

<210> 1701
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710018f01b1

<400> 1701

tttctttcgt ccgcacaaac ccaagcacat cagtagatcg gcatggcgca cttccaggag 60

gtggactact gctcggagga ggtgagggcg gcgggctacc cggtccgccg cggctgcggc 120

ggcgtgcagg agcacatcgt caaggagacg ttcgtgcagg agttcgacac cgccggccgc 180

cgccatggtc accacggccg tggctccggc cacttcgagg tgcgcgagag taggctggag 240

gaggacatca acacccgcac cggcgagttc cacgagcgca aggagaactt cgtcgtcagg 300

gccgatgact aagcttacac gttacggagc acactacgat gtgtgtatat gtcggcatca 360

tatatatgta tgtgtgatgt tgcgcaca 388

<210> 1702
<211> 512
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710018f05b1

<400> 1702

acccacgcgt ccgccatttc ctgcctgaat tcacattatc taagttagtt gccaggtcaa 60

gcttcagaca ggataggcac ttggacagga acatggatgg ggacaaccct gattttcagt 120

tccttcaact ttatttgttc ttcctctaaa gatgtatgct aaaattaaaa ttccttttc 180

tccaagatag agacacataa attgccataa gagaagtcca gagaccggca acttttgttt 240

gcactgttca acttcagaca ggattctcaa cggagactgc gccaattttt ctttcctaag 300

gcttcgttcg tttaatccca cccccgccag gatcgagggg gtatttgtcc cgaaccccgn 360

tgggttttac cctcgcaggg gtttggatcc ccgcttagct tatatgcata ttcggttaaa 420

cccggacggg tttattttcc atccaaaacc ccctcaaacg cagggattca ccgggttttg 480

ggccacgtct tcctccgcgt ggaaaaaaac ca 512

<210> 1703
<211> 467
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710018g03b1

<400> 1703

ttccttgcgt attgttcgac cccccgctct cgtccaatcc aagtcccttt catactaagt 60

gacaccttct gaacatcgga gtttttttcg gaaaggaagt tgaaacctca gcctctgcat 120

cattctgaac attggagtta acggagctgg ctttgcatgg cttttcctat gtgccaatcc 180

agtcttgtga tatagatgtg ccatctctct ctgcatgaca agttctcagg tactcttctg 240

ctgatgaant tcctccacac ctgcagtgac aagaaaacgc tgaagaagtg gttcttcatc 300

gacaagacag tgggctaaga aaatccagct gaaagagaga cgaccgccgt accgagcaca 360

ctttttcttc gtccgacccg atggatttga gcaacggctc accggtcatc agtgatccga 420

tggcaatgag ccagtcgttg atgggagtgc tgccttccaa catgatg 467

<210> 1704
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020a01b1

<400> 1704

ccacgaccca gaacagaagg gcaccgtgaa ttttacagaa acggtgcgct ttgttacccg 60

acgatcaaaa ggacaacccc gaccaccaaa aataatcaaa gaccttccgc gacatagacg 120

atccactgag aaccgcacaa ctaaagacga acaacaaggt cggacacgct gagatgaact 180

aacaactaat cccggatgtt ataccacacg gggacaaaag aaaaactggc gctccccacg 240

gaaaaccgga aagaggacat tgaagacacg acgactaaac tatgaactaa gacgcctgga 300

ccaatcgccc tacccaaaaa acgcccccac ctacaaacta aagggacgcg cccaataacc 360

g 361

<210> 1705
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020a03b1

<400> 1705

ccctgaagag aacggggccg aacaaccggc gaaaacaagg ccctccgggg ccaaagaggc 60

cccgaggagg agaccacgac gaaagaagaa ccgaaagccc ccctccgctc gctgggagaa 120

caacagaacc gagatgtcaa ccagacgggg accaaagaaa aactggcgct ccccgaggca 180

gaaccgaaag aggaacctga agacacgagg cctaagctag gcacagaacc gacccataac 240

aaccacccga cagggaaaac cctggcggaa cccaactaaa aacccatgca gaaccaaccc 300

cctatcaaca gcgggccaaa aaacaaaaag gcccagaccg 340

<210> 1706
<211> 190
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020a06b1

<400> 1706

acaacacaaa cccacaaaca acaccaccaa acaaaaccca ccccaaaaca caaaaaccaa 60

aacacccccc cacaccaaac acccaaaaca acaaccaaca caaccaaaca acacccaacc 120

cacaaccaaa aaaacacacc aacaaccaaa aaaaccaaca acaacacccc cccaaaaaac 180

acccaaaacc 190

<210> 1707
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020a07b1

<400> 1707

caccctgaaa agcacaaccc ccaacaaccc cccaaaccaa ggacccccg ggccaaaggg 60

cacacccagc caggacccca caaccaaaga agaacaaaaa gcccgccacc gcccacaagg 120

agaacaacca aaccccgaac caaaacccca ccaggaccaa aaaaaaaacc ggcccccccc 180

gagacaaaac agaaacacaa ccccgaaaac acaaggccaa acccagacac ccgcccgccc 240

aaaacaaaca cccaaaccca aaaacccccа cgaaacccaa ccaaaacgcc caaaaaaaca 300

acccccccaa gccaaccgac cgaaaaacaa aaaacccccc caccaaacac ccaccaaac 359

<210> 1708
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020a11b1

<400> 1708

ccccggaggg accggtccga tttccctttg gttcacgcgt ccggatccgt cggtcgatcc 60

agaggagatg ggctcgttgg agattacagc cacggaggtg gcggcgctgc tggatctgaa 120

gccgcacccg gagggcggct tctacgccga gaccttccgc gactcctccg tctccctcag 180

caccgcccag ctcccgccgc agtacaaggt cggtcgtgct gtgagcactg ctatctattt 240

cttgcttcct tcagggagtg tttcacatct gcatcgtatt ccttgcgctg aaacctggca 300

tttctacaag ggagagcctc tcacggtatt tgagctacac gacgatggcc acattgacct 360

caccgtaatt ggtccgcacc tagatgctgg gcagcgcccc cagtacaccg tgccaccaaa 420

tgtgtggttt ggatctttcc ctacgttgga tgttgagtcg tttgcatccc atggcagcca 480

tcttgtgaac tctcggaagc gagaccccga gagcactact ccc 523

<210> 1709
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020b01b1

<400> 1709

aaaaccaaac aaacccacaa aaaaaaaaaa acaacaaaaa acacccaaaa aaaacaaaga 60

aaaaagaaaa caaacaaaca acaaaacaaa aaaaaaaaac aaaacacagc caaacacaaa 120

aaaaagaaca caaaaaacaa caaccccaag aaaacaaaaa acacaaccca acaaacaaaa 180

aaaaaagaaa aaaacaaaac accacaaaac gacaaaaaaa caaaaaaaca aagaaccaca 240

acaacacaaa caacaaaaca aaaaaccaca agaaaacaac acacagacac aacaaaaaaa 300

aaacaacgcc aaaacgagaa aaaaaacacc cagcagaaca aacaccaaca aaaacacaca 360

acaaaacaaa acaacaaaac aaacaaaaca aatacaacac aacgagacac aaaagcacaa 420

ataaaagcac accaaacaac aacaaaccca aacaaaaaac aaaacacaac aaaacaaaaa 480

aaaaccgaac aagaccaaca agaaaaacca gcaaaaa 517

<210> 1710
<211> 283

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020b04b1

<400> 1710

acccagagga ggaagggagc aaacaaacgg ggaaaacaag gcccgaagga gccaaagggg 60

aatgaggagg agaaaaagac gaaagaggaa cagaaggccc ggccacgaga gaagggagaa 120

caacagaacc gagacgacag ccagaagggg acgaaagaag aaccgggagc cccgggggga 180

agagcagaaa gaggaggcgg aaaacacgag gcccaagaca ggaacagaac ggccacaaaa 240

acaaagggaa agggaaaacc ccgaaggaaa caaaaaagaa aag 283

<210> 1711
<211> 404
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710020b06b1

<400> 1711

cacccngagg aggacgggga cgaacaaccg gcgaaaacaa ggcccccggg ggccaaagac 60

acacagagga ggagaccacg accaaagagg aacggaaagc ccggccccgc acgcggggag 120

aacaacagaa ccgagaaggc agcccgacgg ggacgaaaga aaaaccgagc gcccgggcgg 180

cagagcggaa agaggagaac gacgacacga ggccaaaaca cggcaccgag ccgccacaaa 240

aaacagccgg gacggggaaa aaccagccga gacccaacaa aaaagccacg caacacaaac 300

cccaccccaa gcaggggaa aagccaaaaa ggccgaaccc gagcggcccc acaaacaggg 360

gcgcaacccg aaaggagaaa gggcccagga gggggaaaca aacc 404

<210> 1712
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020b09b1

<400> 1712

aaaaaaaaaa aaaccaacaa aaaaaaaaaa aaaaacaaaa caaaaaaaac aacccacaaa 60

agaaaaaaac aaaaaaccaa aaaaaacaca caaaaaaaaa aaacaagaaa acacaaaaac 120

aaaaaaaaca acaaaaaaca aaaaaaaagc aaaccaccaa aaaacaaaca aaacaacaaa 180

caaaaaaaca acaaaaaaaa ccaaaaaaac aaaacaaaaa aaccaaaaaa acaaaaaaac 240

aaaaaacaaa aaaaaaaaaa aaaaccaaaa aaaaaaaaca aacaaaagaa aaacacaaaa 300

aaaaaacaca aaaaaaaaca acaacaaaaa accaaaaaaa acagcccaaa aaaaaacaaa 360

aaacaaaaaa aacaaa 376

<210> 1713
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020b11b1

<400> 1713

acagaggagg agcaccacga cgaaggaaca acagaaagcc cggacacgga gagacgaacg 60

aacaaaagag cggggacgtg agccagacgg ggacaacaga aaaccgggcg ccccgcgagg 120

caaaggagaa agaggagaat gaggacacga cggccaaagg aggaacaaga cgagccggga 180

acaaaagacc gaaccggaaa acgcagcgac gacccaacgg aagcgacgcg cggggcaacc 240

cccgagcaaa agcgggcgga aaggcgaag 269

<210> 1714
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020c07b1

<400> 1714

aacgctgctg ctcgagatcc gaaaaccggg gctccacccc cgaaccggcg cgagagaaca 60

gtgtgacttt taaaggaccg ggccggctgt cccccgaccc agaggagggc gaggccgaac 120

aaccggcgaa aacagggccc tacggggcca aaggaacccc ggggaggaga ccacgacgaa 180

agaagaactg aatgcccgcc tccgctcgcc gggggaacaa ctgaaccggg aggacagcca 240

gacggggaca aaagaagaac cggcgccccc cgcggcagag ctgaaagaag agccggagga 300

cacgaggccc aaaccaggga ctggccgaag aatgacaacg acgtgaccgg caaaaccccg 360

ggggaaccca a 371

<210> 1715
<211> 400
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710020c08b1

<400> 1715

aaaaaaaaaa aaaaacccca caaaaagaaa aaaagaaaaa aacaaaaaaa acaaaaaaaa 60

aaaaaaaaaa aaaacaaaaa aaaacaaaga aaaacaaaaa aaagacaaaa acaaaaaaaa 120

aaaacaccaa acacaaaaca acaaaagaaa aacaaacaaa caaaacgaaa aaaaaaagaa 180

acaaaagaga aacaagaaac aaaaaaagac aaaacacaaa aaaaaaaaaa acaaaccaaa 240

accaaaagac aaaaaacaaa aaacaaaaaa aagaaaaaga gaaaacaaac aacaaacaga 300

aagaaaaaca aacaaacaaa aacnaaaaaa aacaaaaaca gaacaaaaac aaaaaagaca 360

acagagagac caaacaaaaa acaccaagaa aaacaccaaa 400

<210> 1716
<211> 464
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710020d01b1

<400> 1716

aaaanaaaaa aaaaaaaagt gttnaattaa aagaaaaagc cctttaaaaa cccaaaaaaa 60

aaaaaaaaaa aaaaaacccc caaaaaaaaa aaaaaaaaaa aaaacaaaaa aaaaaaaaaa 120

aaaaaaacaa aaaaaaacaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaacaaa aaaaaaaaaa aaaaaaaaaa aaaaccaaca aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaac aaaaaaaaaa acaaaacaca caaaaaaaaa acaaaaaaaa 360

aaaaaaaaaa acaaaaaaac caaaaaaaca aaaaaaaaaa aaaaaaaaaa ccaaaaacaa 420

acaacaccaa aaaaacaaca aaaaaaaaaa aaaaaaaaca aaaa 464

<210> 1717
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020d05b1

<400> 1717

acccagaaga gaaagagccc agacaaccgg agcaaacaag gcccaaaggg gccaaagaaa 60

gactgggaag gagcccatga caaaagagga actgaaagac ccgccacgct cgcagggaga 120

acaactgaac cgcgaagaca ggacagacgg ggacaaaaga agaacggggg caccgcgagg 180

cagagcagaa aaaaggagca cgaagacaca aggactaagc gaggcacagg ccgaaggaaa 240

aaaacagagt gaagagggaaa aaccaggcgt aaccaaaaca aaaagcccag aaaaacaaac 300

accaaaagac agccggcgaa aaagcgaaaa ggcccggacc gaacggccac ccaacaaaag 360

cacaaacaga aagggcgaaa ggcgccagaa gcggaaaa 398

<210> 1718
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020d07b1

<400> 1718

aaaaaaaaca accacaaaaa aaaaaaaaaa accagaaaag aaaaaaaaaa aacaaaaaaa 60

aaaaaaaaaa aacaaaaaaa agaaaaaaaa cagaaaaaaa cagaaaaaag aaaaaaaaaa 120

aaaaaaaaga acaacgaaaa caaaaaagaa aggaaaagaa gaaagaaaca aaaaagaaaa 180

aaaaaaaaaa aaagaagaaa aaaaaaaaag agaacaaaaa aaaaaaaaaa aaaagaaaaa 240

aaagaaaaaa aaaacagaaa aaaaaaaaca aaaacacaaa aacaaaaaaa aaaacacaaa 300

aaaacaaaaa aaaaaaaacc accaaacaaa aaaacaaaaa acaaaaaaaa aaacaagcaa 360

aaaaaacaaa aacaacagga aaaaaaacaa aaaagaaacg aaaagcacaa aaaaaaaaac 420

aaccaaaaaa aagaaaaaca aaaaaaacaa a 451

<210> 1719
<211> 184
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020d08b1

<400> 1719

gacccagagg agaaagagac cgaacaaccg gcgaaaaaaa ggcccaaagg ggccaaagaa 60

acaaagcgga ggagcccacg acgaaagaag aacagaaggg cccgccgcag caagcagaaa 120

gaacaaaaga accgagaaga cagcccagaa cggaaccaaa agaagaaaca ggagcgacga 180

gagg 184

<210> 1720
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020e06b1

<400> 1720

gctaatcctt agaggagttt ggcctagtgc cggggattgt tttcatgccg atgaggattt 60

tgctgccggc gcgcccgagc cgcgttcggt ggttcctggc gatactcttg ttggtggtgg 120

cggttggctc gctgctgttg gaaggaggtg cgctggaatc ctcggaaata agctcgatgt 180

cttccctggt atgcaggaat ccccttcgct tgctctcgcc gacggcagtc accatggtgg 240

tggtcaagtc gacggggact ggtatgaaga cggctcttgc gaccggttcc agagcaaatc 300

atcgatggtg cttgagcttt ggcgctcccg gcggacagcc ggcttgcagc gccgccgcgc 360

caccgaatcc tctggccaaa gggggggcaa acctcttcct cctagccttg aagctatatg 420

ggagggaggt gctactctag ctcgatgttc a 451

<210> 1721
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020e08b1

<400> 1721

cccgaaccgg cgcgagagca cagggtgact tttagaggac cgagccccgc tgtacccccg 60

acccagagga ggaaagagac cgaacaaccg gcgaaaacaa ggccccacgg ggccaaagaa 120

gccccgagga ggagaccacg acgaaagaag aacagaaggc ccgccagccg acgctgggag 180

aacaacagaa ccgggaagcc agcccgacgg ggaccaaaga agaacagggg ccccaagcgg 240

aaaaacagaa agaggagcac gagaacacga ggaccaagca cggagacgag ccgacgaaac 300

acaaaaaacc agaatggaaa aacccccgcg gaaaacccaa acggaaaaa 349

<210> 1722
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020e10b1

<400> 1722

gggggggcgga aacgatgccc ctggccgtcc gaaacccggg gctacaaccc ccgagccggc 60

gcgagagcgc agtgtgactt ataaaggacc gggccggttg acccccgacc ccgaggaaga 120

gggggggcgaa caaccgaaag aaacagggac cgaaggggcc agagggcaaa gcggaggaga 180

ccacgacgaa ggaagaacag aaagcccgcc accgagcagc gggggaacaa cagaaccggg 240

aggcgagccg gacggggaca aaagaagaac gggcgccacg aggggcaaag ggggaagagg 300

accaacgagg acacaaggcc caaacgagga accgggcgaa cgcaccacaa aacccgagac 360

ggggaaaaaa ccagga 376

<210> 1723
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020f02b1

<400> 1723

aaaagaaaaa aaaaaaaaaa aagaaacaaa acgaaaaaaa aaagaaagaa aaacaaaaga 60

gaaacaaaaa gaagacaaaa aaaagcaaaa gaaaaagaaa agaaaacaaa aaaaaaaagc 120

aaaaaaaaaa aaaaaacagg cagagaaacg aaaacaaaaa aaaaaaaaaa aaaaaaaaaa 180

aacaaaagaa aaaacaaaaa aaaagacaag aagaaaaaac aaagaaggaa agaaaaagaa 240

aaagaaagaa gcaacacagc aacaaagaaa aaaaagaaag aacaaaaaaa cgagagaaga 300

aagaagaaga agaaggacaa cgaagaaaac aagcaaaaca aaacaagaaa agagaaaaaa 360

aaacaaaaca aaaaaagaaa aaacaaagaa aaacgaagga gaagag 406

<210> 1724
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020f03b1

<400> 1724

aaaaaaaaaa aaaaaaacaa aaaaaaaaaa aacaaaaaaa aaaaaacaaa aaaaaaaaaa 60

aaaaaaaaaa aaacaaaaaa aaaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaacaataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacacaaa aaaaaacaaa 180

aaacaaaaaa aaaaaaaaaa aaaaaacaaa caaaaaaaac aaaaacaaaa caaaacaaac 240

aacaaaaaaa aaaaaaaaca aaaacaaaac aaaacaaaaa aacaaacaaa aaaaaaaaaa 300

acacaaaaaa aaaaaaaaac accaaaaaac caaacaaaaa aaaaaaaaaa aaacacaaca 360

c 361

<210> 1725
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020f11b1

<400> 1725

gaaacccggg gctaacaacc acgaaccgga gcgagagaac agtgtgggtt ttaaaggacc 60

gagcccgctg acccccgacc ccgaggagga gaggagagaa caaccggagg aaccaaggac 120

caaaggggcc aaaggggaa aagaggagga gagccagaac aaaagaagaa ctgaaagacc 180

gccaccgccc cgggggggaga acaaacagaa ccgcgagagc gaagccagac ggggaccaaa 240

agaagaaacg ggggccccg agaggcagag gggaaagagg agcttgaaga caccaggccc 300

aagagaggca caggacagac cgcaacaaag ggggggaccg ggaaaaccca ggc 353

<210> 1726
<211> 145
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020g03b1

<400> 1726

acgaacggga gcatgcgacg agttgtgttt ttaaaggggc gatccggttg caacccaccg 60

gccgggggtg aacaacgcgg cgactggcaa aaccatggcc gcaccgaacc aaagcgcctc 120

ggaggacaag cccatgacga aagat 145

<210> 1727
<211> 342
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020g08b1

<400> 1727

cggacacgga atgccctggc cgctccgaaa aacggggata caacccacga gcgggcgcga 60

gagaagagcg tgacttttga aggaccgaac ccgaagtaac ccgacgccga ggaggaaaga 120

gcgcgaacaa cagaacgaac cagggaccta acgggacaga ggggcaaaac agaggagtcc 180

acgacgaaag aggaactgag agaaagccgc cctgagccga gcgaacaaac agaaccgagg 240

ggccggccgg acggggacga aagaagaacg ggagccacga agggcaaagg ggagagagga 300

gcaagacgac acaaaggcca agctgggagg ggggcgacgg ac 342

<210> 1728
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020g10b1

<400> 1728

cctcgcgcgg ggggacgcgg gggcggacgc gtgtgcggta ttgtaatggg cggacgcgtg 60

tg 62

<210> 1729
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020g11b1

<400> 1729

cccacgagcc ggcgcgagag aacagcgtga cttttaaagc accgaacccg catgaacccg 60

accctgaaga ggacgagtcc gaacaaccga acgaaccagg gccccacaag gccacacggg 120

gaaaacagag gagtccacga agaaaaaaga acagaaagac cgccacccca agccgggggа 180

acaacagaac cgagacccca accggacagg gacaaaaaaa aaaccggagc cccgaagggc 240

aaagcaaaaa gagcaccaag aagacacgag gcccaaacag ggcacaggcc caccccaaac 300

aaccgccggg accgggaaaa cccaggcgca acccaaacaa aacgcacaac aaaacaaccc 360

ccaaaagccc aacggacgca aaaaacaaa 389

<210> 1730
<211> 525
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710020g12b1

<400> 1730

ccagggcgaa ggcaaaaacg ccgtagcctg agactccgaa aaacggggct accacccgcg 60

aaccggagcg agagaacagt gtgagtttta aaggaccgag cccgctgaac acccgacccc 120

gatgaggang agacccgaac aacccggcga agcaaggccc tacggggcca atggagaaac 180

agcggaggag gcccaggacg aaagaagaac agaatgcccg cccccgaaag aaggaggaaa 240

aaccaaaccg ggaagacaac ccgacggggg acgaaagaag aacgggcgca ccaggcggca 300

aaaccacaaa aaggaagccc gaagacacca ggcccaaaca cggcaacagg ccggcaacca 360

acaacgacga gaaaggaaaa accccgaacg aacccacaac aaacaacgag agaaaaaaaa 420

accccaacca caagcggccc aaaaacgaac aaggaccaaa acgaacaccc cacacaacca 480

gagagcgaaa ccaaaagaca aaaggaagca cgaagaaaaa caaac 525

<210> 1731
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710020h03b1

<400> 1731

accgaaagcc ccccaccccc agccgggggga acaacccaac cgagacgcca gcccgacggc 60

gaccaaagaa gaaccggcgc cccgcggggc aaacccgaaa aaggaccccg acaacacaag 120

gcccaaccca ggcaccgacc cacgaaccac aacgacccca accgagaaaa ccccgacggc 180

acccaacaaa aacaccccgc aacacaaccc cccacacgcc aacaggc 227

<210> 1732
<211> 141
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710020h09b1

<400> 1732

gccaaaaccg aataaccttt acattcaaaa accaggattt aaaaccacaa accggagcaa 60

aagaaaagtg tggnctttga gagagcgagc cggtataaaa ccaaccccca aaaaaaaaca 120

aaacacacaa ccggaaaaac c 141

<210> 1733
<211> 322
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024a09b1

<400> 1733

gatggggtca cctccgttgt cattcccctt gcgcttgctg gcaccagctt gttcatgatt 60

ggccgcggga tctacaacat gtctaatggg atcgggaaaa aggagtgaat ttctgtgggt 120

tttgctagta tctcagtaag cggcatggaa gcaatactgc ccaagctatg atgtcatctt 180

cgtttgcaaa taatattgtc agagaaagac tcgggtccat ttcatgttct cttttgctgg 240

tatttgcgga tgcttgctaa acttgcaatg atgatgctat aacatcagca tcgtccactt 300

tgcgtttnna aaaaaaaaaa ca 322

<210> 1734
<211> 460
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024b05b1

<400> 1734

gcaactacgt gctgttggat ttcggnggca tcaacatgct gcacaagggc tcggtcgagc 60

aggccgggtt cgcggtgctg aaggcgcccg acattccgtc gatcctcgtc gagaccgcgt 120

tcatcagcaa cccggacgaa gagcgccggc tcaacgacga cagctatcgc gacgagatgg 180

ccgacgcgat cttccgcggc atcaagcgtt atttcgccgc gaacccgccg ctcgcgaaga 240

accggatggc ctgacggccg aacctccccc gccgccggca cgcagcgcgt gccggcgcgt 300

cacgacgccg cgaagcggcg catcagtttc ccgccgaaca cgttcaccgc gagcccgccc 360

atcacgagcg ccgtgccgat cagttgcgtg cgcgtcaggt gttcgtcgag cagcagcgcc 420

gacgacgcga gcccgacgat cggcaccagc agcgagaact 460

<210> 1735
<211> 96
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024c11b1

<400> 1735

ggccccggnn gagcaggcca gggtcgcggt gctcaaggac ggcgacattc cgtaaaatcc 60

ttgtcgagac cgtgtcgcat caggaaccag gacgaa 96

<210> 1736
<211> 233
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024d06b1

<400> 1736

ccccccccctg gcccggtaaa aataaaatac cctttcttgc cccgcccccc agcnggagca 60

gagaaaagat cgatttgcca agtatagtgc aagtgtccca catacgaacc ttgaccgtct 120

ttggggagtg gcaatcattg ctcctttgtc cgaacacgac gatctttcca gcgcttgctc 180

taccagatgc agaaggggtt caggcccctg accttgtccc aattggaaag ctt 233

<210> 1737
<211> 236
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024e02b1

<400> 1737

cccgagagac ggtcgcactg cgtatatggc ttgggccatg ttcttggggg agcctgacaa 60

gataactgat gccgctcctc gtggggacac tgaccggagc agcctgacgg acaaagaaga 120

actgcctccg gtgcagactg aaagaggagt tgagacacag gcctaagctg gcctggcgcg 180

tttaccacgc agctggaaac cctgcgtacc cactatcgcc ttgagacatt cccctt 236

<210> 1738
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024f05b1

<400> 1738

gctgggcgag caggccggtc acctgtgctg aggtgcccat cattgcgcat agcctcgtga 60

gaccgagttc atgagcaacg cggaccaaga gcgccggctc aactaccaca gctatcaaca 120

cgagacggac gacacgatct tccg 144

<210> 1739
<211> 463
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024f06b1

<400> 1739

acggcaacta cgtgctgaag gatttcggcg gcatcaacaa gctgcacaag ggctcggtcg 60

agcaggccgg gttcgcggtg ctgaaggcgc ccgacattcc gtcgatcctc gtcgagaccg 120

cgttcatcag caacccggac gaagagcgcc ggctcaacga cgacagctat cgcgacgaga 180

tggccgacgc gatcttccgc ggcatcaagc gttatttcgc cgcgaacccg ccgctcgcga 240

agaaccggat ggcctgacgg ncgaacctcc ggcccggcgg gaacgcagcg cgtgccggcg 300

cgtcacgacg ccgcgaagcg gcgcatcaat ttcccgccga acacgttcac cgcgagcccg 360

cccatcacga gcgccgtgcc gatcagttgc gtgcgcgtca ggtggtcggc gagcagcaac 420

gccgacgacg cgagcccgac catcggcacc agcagcgaga cct 463

<210> 1740
<211> 101
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024g02b1

<400> 1740

gctggtgcaa tagctgaaga ggccagtgaa cccgccgttc acaacagcgg cgccgactga 60

agggctgatg gtacgcgcgc tgagcggaca ggagctcggg a 101

<210> 1741
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024g04b1

<400> 1741

ggtggcgttt aaagccaacc cagaggaggt cgtgttacaa caactggact gggaatagcc 60

tgtcgtgacc caagttaatc tgctggggag acaatgacct atgatcagct ggaggaccgc 120

ctacagtgct ggatgaacag cccatccgaa aggtgcgcat gctgaatgcc aaagaggacc 180

tgccctgccg cgtggcataa atcacggagg acgttgtgga cacgagcact aagaccggta 240

ctggttggca gcgctactac gccccgactg tgaaatctct ggcgttactt aattgacacg 300

tctggcggca catccc 316

<210> 1742
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024g05b1

<400> 1742

ctggggcgag caggccggga ctcgcggggc tgaaggtgcc cgacattccg ccaatcctcg 60

ccgagaccgc gttcatcagc aaccctgacc tagagcgccg gctcaacgac gacagctatc 120

gccactagac ggccgacgcg atcttccggg gcataaagcg atatttcccc cgcgaacccg 180

ccgcttgcga aaaaccgtat ggcctgacgg ccgaacctcc gccgccgtcg gcacgcatag 240

agtgccggcg cgttacgact cctcg 265

<210> 1743
<211> 496
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro5710024g06b1

<400> 1743

acggcaacta cgtgctgtag gatttcggcg gcatcaacat gctgcacaag ggctcggtcg 60

agcaggccgg gttcgcggtg ctgaaggcgc ccgacattcc gtcgatcctc gtcgagaccg 120

cgttcatcag caacccggac gaagagcgcc ggctcaacga cgacagctat cgcgacgaga 180

tggccgacgc gatcttccgc ggcatcaagc gttatttcgc cgcgaacccg ccgctcgcga 240

agaaccggat ggcctgacgg ccgaacctcc ccgcncgccg gcacgcagcg cgtgccggcg 300

cgtcacgacg ccgcgaagcg gcgcatcagt ttcccgccga acacgttcac cgcgagcccg 360

cccatcacga gcgccgtgcc gatcagttgc gtgcgcgtca ggtgttcgtc gagcagcagc 420

gccgacgacg cgagcccgac gatcggcacc agcagcgaga actgcgcgac ctgcgcggcc 480

ggatagcgcg acagca 496

<210> 1744
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024g10b1

<400> 1744

ctttggctcc tgaaattttt tttttccttg gggcaccttg ggttccctca aaccctctga 60

ttttatgttg ttttggatca ttaagggtta 90

<210> 1745
<211> 87
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024h06b1

<400> 1745

ccctgggaga gcggcccgtc aactgccgtg aggtgcccgt tatggccaag tttctctgag 60

acggagttca tgaccaacga tgacctg 87

<210> 1746
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro5710024h08b1

<400> 1746

aaccgttgac ttgctggcac caccatgtac aggaaaggcc gagggatcta caacatgtat 60

aatgggagcg ggacaaagga gtgaattgct gggggctccg ctagtagctc atttagcggc 120

atgcatgcaa tactgtccaa gctatgatga catctacgtt tgcaaatact attgtcagag 180

agagactggg ggacattgca tgttctctat tgctgggatt tgcggatgct tgctaaagtt 240

gcaatgatga tgctataaca tcagca 266

<210> 1747
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057a02b1

<400> 1747

cactggttcc ttatgctgcc gtgtaatatt aacatgtttg cgtttttgtt tgactaactc 60

ctgttgtttt tccctttca gaacttcaaa aattccaaga gcttgggaaa gaagaaccta 120

taacatcact gcatgatgga ggagaaagca gcagttgcat acacgcagga cacgaaggag 180

ctagtgaagc aagctcttct taccggtttg ggtctgaaaa gatgggagaa atggaattaa 240

cttctctaga ttccgagata ctaaacctgg tgaacaatgt agagcatctg gagatcaaac 300

tagaagaagc aaagcgtatt cttgaggtta aagaaacaca aatccgcgaa ctcgaatcta 360

ccataaacgt ttcagagacg tgtaacggag gaacagagat cggg 404

<210> 1748
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057a07b1

<400> 1748

ggacaggtcg cgttggcagc tctcgatcct ggcagatggt gatggcgtta gcggttgttt 60

actcttttgg attctgaatg gatttccctg gaagttttgt aacttttggt gcagaggtag 120

atgctgattg gccttccaag tatctgagtt tggtattcaa tgcctccact ttggcattca 180

ggtcattgta gctgcagtcc agcttatggt gcaattcaga taatttctta gccatttcca 240

ttgagctaga tgcttgtccc tgtagcagct gctggaccat ctgtttcatt tcagcatcag 300

gggcagcagg accttggttt tgctgaggtg caaacccagg tggtggtggt tgctggtagt 360

tcccctggaa ttgctgctta ggaacgaaac ct 392

<210> 1749
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057a08b1

<400> 1749

tagctttcca cagaacaaca ctcttaaaca aaattcacac tgtaaaattt tgcatcgttt 60

attcttgttt agaggcattt cgaaattaaa atatagaact atcatatacg agacattgac 120

aagtggaatg gctattgact gtaactagct acaagcgata tcgtggtaca ttaaccggtt 180

aaatcgtata gttcccgttc ccggttaagc gtggtttcca ccatcacatc attccatgaa 240

tcaattggac caggtaagca ccaatgcaga caatcattct gaacattgct cttattctta 300

actccagcaa aaggatttgg atgcctgtac ggtcccggat gcccgtctgg acggagaaga 360

gacattccag tcgtgtctaa tagcctgatg ttggaaccta agccaaaacc tttcccaaat 420

ttctgaaaca cctcaagctc aacatcacgc atcacatcat ctacagtttt catatttgc 479

<210> 1750
<211> 510
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057a12b1

<400> 1750

aactacaggc agtggttttt ttcttttcgt tattgtcaca agaaacagac aggtattatt 60

catatgcaag agatggatcc agcttctggg ctgctgactc tttagcgagc ttctctgcct 120

ttgcaaccac ctcatcgata cctccaacca tgtaaaacga ttgttcggaa agatcatcgt 180

acttgccatc caacaaaccc tgaaacaaac acaagatgat tttggtcact tactcttact 240

ctaaatattc tatttgataa taacaaatct atctacgcca gagtaaattt agtccatcta 300

cacatagaca tcacaatgaa ttcttctata ctgaaaggca gttgtagcta aacttctaat 360

acgcggacat gttaaggcag cattgaaagc tttcaggaat tcaaagcaaa atgtttgata 420

atcatatgat tatagcaaaa tgttgttgta tgtatcatac ctggaaactg ttgatgtttt 480

ctttaaggtc gacatatttt ccaggggcac 510

<210> 1751
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057b01b1

<400> 1751

ctttgttttc ctctagacca atgagcttgt tgtgtctgtt tatgtggcag ttctcgagtt 60

cttaatgttt ccaatcgatg accgcatcaa tgtctattga gtccttacac gagatcatgt 120

aacagcaaac ctctctgtct gttacagatt caagcccttt gcatcaaatc atttcaaagt 180

catatactcg aatccagatt gttttgtatg gactttgtat aagaaactta cagttgatca 240

accaaagctt gcttagagag agcttcagac ttatcgattt tgctgccaag aatcagaaga 300

ggaatgccac ttaaagacgg tttcgttagc agatcattca attcgcttct tgatatcggt 360

acactattct tatctgcagc atcaatcaca tatctgcaat attaccacag taacatatac 420

c 421

<210> 1752
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057c11b1

<400> 1752

tataaatgtt gtctaaacac tcatactcca tttctaactc ttatgttttg tcaaatgcat 60

tggattgtga cacatgttta ccatagaaac actagcaaag ctatttactg cttctaagca 120

aatttttgtt ggtttttagc ctcttttggg acaaaatggg tataagtatt gtttaaacac 180

ttctacttca tctctaactc ttatgattag gtaaatgcat tggattgtga cacattttga 240

ccataçaaac actaacaaag ctatttactg cttctaagca atttttgtt ggttctagcc 300

tctcttggaa gaaaattggt ataaatgttg tctaaacact cctaaaccgt atctaactta 360

tataactagt caaatgcttt gaattgtgac aaaatttgat tttgaaaaca ctaacaaagc 420

tatttac 427

<210> 1753
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057d03b1

<400> 1753

ttccttccct tttgctatgt atttggacaa agttgggcta aagttgggta aattcaatgt 60

tttttttctc cctaatttag cttatcggtt atcttcttta gtactacaat gacccgtcaa 120

aggagaaact tttgaaaagc taacccacaa agtagctttt ttgttcagtt gagtactcat 180

ttcgtttttc tcttatccag tctcatgttt gtcaatcttg attaggtttt tgcctctcct 240

ctttcacaac ttcttatcaa aggttgaagg ttgaagcaat gatggatatg aaggagagaa 300

tggtgaagaa acttaagctt attacatctc ttgggaactt gaag 344

<210> 1754
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057d05b1

<400> 1754

gctcgctgga agagttcgtt ccgggatgtt ttgctttgat cgacttctcg gcaattaacg 60

aaattctccc tggcgtgctt ggcgtaatac ggccttgaat tcgccggcaa aagtctcacc 120

agcctcataa cgccgccgta tactctcagc accttcttaa ttttcgatta ccttctgcaa 180

cacgttaccc aattctagga ctctaatact gtatcataaa catccatggg ctcttaatgg 240

gcctttaata ataagcaatc actgaccggc taaacgttca catttgaggg tctaaaaccg 300

gttcaaacaa gacttttaaa gcttaaatct cttgatcttt taaaccggtc tctatcgatt 360

acagaaacca taactcaaaa catctcttta gatggaaata aacaaaaact tttattatct 420

taacacaaag ccttaac 437

<210> 1755
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057d06b1

<400> 1755

aaacctgttc aatcaccatt tgaaaagtac agaatttcac atttattaga gcttggagtt 60

tctcatatat tgaaaagttt aacagcacaa aacacttacc catatggcta acagcaccga 120

gctcttgaat acaatcccac accatttcca tatttggtta agcaagactg aagtcctctt 180

tgacttgaca tgctcgatag catacctggc cccagatatg gtagtccaaa aggcatatgt 240

gccaatgacg aaagcataca aatctacata tttttaggga atactgttaa taatgtgtaa 300

cccgtgccaa agaatgactc agaagatcaa aattaacaaa cattaccatt gcacttgatg 360

ccatgagtta ttggaagaat gggaatggca ctgaattaga gcacgtccca gcgaaactgg 420

cacaacta 428

<210> 1756
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057d11b1

<400> 1756

gattttggta ttctgattcg atctaagcaa gttaaattaa aagagacata atagttcttc 60

tctcttaatt gaatctttct ttacaaaatt atcaacaaag ttataaaaga aagtcccaat 120

aaccgaagaa atcgagactt acaaggcaaa gtaccaaaca caaactctct ggaatcactg 180

cacaaacata tcctacttat gttgacttct tttttctcaa atctcaaaat gaaccttccg 240

tttg 244

<210> 1757
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057d12b1

<400> 1757

atgaaccaca aatgtcataa ttcattctaa tggtctttcg ttttgtacca ataggcaagt 60

tcgattcgtg aagcgttttg ttgaagcgct ttcggagggt cgtgttacag cacgaaatcc 120

gcagcatttg gatctcttac tggtctcagg cagacaaatc tctgggacag aaactagcaa 180

ctcgtcttaa cgtgaggcca aacttctgaa tgatatcatc tctaaagact aagtgaaatc 240

ctataaactc aatatgctcc tcttacggtt tggtttctaa gtaatctcgt ttattgacaa 300

tgaaacgctt aaagaagggt actagttcct gtttgtaatc ttcttttcaa aatattaacg 360

attattttct aaggcaaata aataaaaagc tatgactaat atagcttagt aaacaagtat 420

tactatcatc catttggttc tactttaaaa atggattttt 460

<210> 1758
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057e01b1

<400> 1758

attcttgaat acacataatt tataaacata ggttagattt tcttagttaa atcagtgttt 60

cttctaaaga tcgctatcac tcggggtaca catcctttgg tgtgggttct cgcataaact 120

ttcacctcct ataggacgct cttcagagaa cagaggcaag aaataccctc taagcccctt 180

tagatctcat gattgggaca aagttgatag tagaagagac gctgccagga tttcgtcctc 240

ttttggcaat acaaatctac aatggcgaga aaaaactact tctagatgca gtccaagacg 300

ggatagcttt gaagtattga taacacgacg ttttagcccg ttttatctat tgt 353

<210> 1759
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057e06b1

<400> 1759

tcttcttaaa tgcatcatca tcatcatcat ctaaactctc ttcagattca tcatcattat 60

ctaaaacctc ttcagatgca tcagtatcat ctaaaccctc ttcagatgca tcatcatcat 120

catcattatc atccaaatct tcttcagatg aatcatcata atcatccaaa tccttcttca 180

gaagcatcag tagctggatc tccttctttc cagcacagag gttcagttat cttcacagta 240

tcctttggta catcaataac tggaagaatc tgtacctcag cgacaataat gagtctatct 300

ctcacgagaa atccattgcc tctagcatct gtaccttacc aattgcagtc agaggctacg 360

aaggtgcgag agtagcaatt gttatgttgc aatgaacaga agtttttcaa aacccaactg 420

aatcttgtct ccttttgctt gctcattatt cttgatgaaa cggttgaaag tggcggagca 480

caatagagaa tcact 495

<210> 1760
<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057f08b1

<400> 1760

ggctaaatcg tgactataaa gccacgaatt ggtcatgtaa aaattcgtgg taaatatagc 60

cacaacatag ccacgaatat attcgtaacc aaatggtgac gagaaaattt gtggataatt 120

cgtcgctata caatagccac gaaaaacaac gcggcttttc gtcgcaaatc caccgaatta 180

aacatcacat catgcaacaa caccgaatta tacaatatcc acgaatggga aacgt 235

<210> 1761

<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057f09b1

<400> 1761

ttgctctagc tagattgtcc aaaggagcaa atatcaggat agtaaagaat ctgagaattt 60

gctgagattg ttacgctgtt atgaagctaa cgtcgaaggt tgtgtggggt agaaatattg 120

gtccgagaca gaaatcgctt tcattcattt aaggacggtt cttgctcatg ccgtgactac 180

tggtaaaagg ttgtggatag atgtacacca cacatatatc attttgtgga ctaatgcatc 240

cactagtgac ctcaccaatg gaagcttcac tcccaacaca aactttcaga tctctctact 300

ctctacaact tgaggtcttc atttgcgagg tttgtggttt acattgcctt gggactgtgg 360

gtaactttga tactttgtat tcttcttggc ctagaacgta atatacgaaa tttgtttgga 420

ctgttatttg aaatttctaa cagattctac caaactttga ccagaaatat caagcacgtc 480

ttcg 484

<210> 1762
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057f10b1

<400> 1762

aatactagaa gaaaggcacc gacacctaac aaaattaagt gaatacccaa aatggttgtc 60

attttatttt tatctttcca tacatagccg aaaggggaa aatataattc aagagtgtcg 120

ggtcccagaa gtgcatgata aataccgcca aagcccaaaa ctgcagaaga aattaagtga 180

agtactccag atacaaagta cggaaaggtg tctataactt cttccccagg acctaccccc 240

catcctaaag tggctaggtg gggaagtaaa attaatcctt ggtcatacat gggcttttca 300

ggtacaaaat gggccacttc aaataagttc attgctccgg cccagaatac gattaatccg 360

gcatgggcta catgagcttc caaaagttta ccagataaat tgataa 406

<210> 1763
<211> 471
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057g01b1

<400> 1763

tgagtttggt ggaatagagt tctaacaatt tcctcttcac ctggtcaccg gtagaagaaa 60

tgggtcaatg ttagtaatca ttacacaatg aactaaaatg tctttatctt tgtggtctta 120

tatgtttctt atcacctttt gctccatcaa acaaaacttc atgaatttga ttattctgga 180

ttttttttaga acacgtagtt catgtgacta tttatgtggt taaggtctct actataattt 240

ggagtatccc caacgcttta gctgtatatg ttaccttgga tagagttcta agatacaaac 300

attgtataat ctttttaaat gattctgata aactgatact gatcataata aaccaatatg 360

agaagtagca cacaaaaaaa attacaatct agtgattttt agtcaactta cttttggttt 420

ctggaattgg aggaaccacc tcttcagctt cagctgctgc agcaagtgtt t 471

<210> 1764
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057g02b1

<400> 1764

agacaatcgc tacttacaag gagaagcttc tagcagcgaa cccattttta actgtttttc 60

ctgtctttct ctaacctgaa aagaagacat caatattata ctcagctgga atttaaacgt 120

tttggctgga acgataaacc ggccaaagaa ctcacctggc aaaacaatta ctgaccctac 180

gaagacgcca taaacgtagc atactgaaaa taccatatcc ctgaatactc tcatgaagca 240

agctcccaaa aatttcgtaa ggaaatgtgg aaaccacgtc gaaaatcagc caagtcgacg 300

catatctcca agctattctc tttggatcat cgacaagaag ataagttacc ttgtccagaa 360

ggcaacaaag aatgtcaaga ctatatcaac agcgaaaaac ccgttgacaa tgttatcgag 420

aatactgaga ggtggtcttg gcttttgcag aaacccaaat tca 463

<210> 1765
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057g04b1

<400> 1765

ctgtttggtt tgtggatttt gcacagtttt aggaaattca catattaaga agggaaatga 60

attttgacta ttaacatacc tgttcaagtg cattaggtcg ggattcaaaa acaatcagaa 120

gtacgcctaa tggtgatgag gttttctcta agacaagacc atttgccacc tgtaaaagga 180

attgtcacaa agaacaaata gcattaacaa ctattgtatg tcaactagga ggatagtcat 240

attccttatt taactcatga gtatgtaaat taactatatg gtaacaattg tcctctgatc 300

acctctgttt tctttaaaac acg 323

<210> 1766
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057g07b1

<400> 1766

agcctataat aatgcgacag aagctactga gagtctgaga ccacaaaagt tgaacatttt 60

tgttacctaa ttataatatg ctaagtagag ggcactttac tttgggtgta aatgtaacag 120

aaacccctga aacgaactca agcgcctcgt atgatgtgtg gtttggatcc gcatagacct 180

ctgtattgag agaaagttga ttacagataa ttagatcatc tcataaaagg aactactcac 240

caggcttttt tagtaatcaa gagaaaacat acctccttta aacttagtct gttccacaaa 300

agtattagcc tgcatacata gatggtcata acgtgagaag cagcagctta aaactgctta 360

cgcttacaaa aattgcgtat tcaaaatgtt gtttacctga tcgatgcttt ccggtccgat 420

cagaacaaga gcaacaccag atg 443

<210> 1767
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057g11b1

<400> 1767

aatgcattag aaacttgggc tacagaaaac gtgaactttt ttaagatccc aacgaaacct 60

tcaaagatta tcattggtat ccaactattg catgctctgg atatccaact attgcacgct 120

cttcaactct catcaacaac ttttattttg acaaatgttg cgtcattctt acaagtttgc 180

catataaaag aagcttatct atagctgcaa accaggagcc ccgaaacaat ggtttcatat 240

gctgagctct tgtttgaatc aaatagactg tagaggagaa atcggcaaaa aacacaaaat 300

aaataaaaaa cgacccagtt gtatatgttt agatcaggat ttaagccagg attacaaaga 360

cgccatccgg ctttgtggta gaccaacaac acagctgttt ttggaacctc aatacagacc 420

accaaaacag ttcttgctcc 440

<210> 1768
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h01b1

<400> 1768

tgaaatataa atagatgttc ccttcgactt tttgagattt caactatatc gaactcctcg 60

tcctaagagg atgattttac gttgatgcga cataacagtt ccgactcatt actcatttttt 120

gtgatatcat ggttagggga aatcaacgac tcagaaccat aaacttggga attaccaccc 180

aatgggagaa gaatggacaa agaatttcct tgggctctgt gatcaaactc tgctggcact 240

tctcttcctg gtaacagaac cgacc 265

<210> 1769
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h03b1

<400> 1769

atgcttttca ctttcctata tatttatgaa aactgcagtt tcttatcagc ccttttgtac 60

caaaactgat tggaaagttc cccccggagc cgaggacagc cattacagcg acaaataaga 120

caatcattga tcctaacaac tgcaccattt tactcaactt atcagcgatt tttcgagatt 180

tccatattta ttgcagacac atgaaactaa acattgttac caattctcaa aaggtgaatg 240

aaaaatgttc tacaaaatgt aagcaacgat gtattagtgt acctgaagac gcaaggagag 300

ccacaagctt gcgattatct ctgagtaaga agtccgctgg tatagcgtca aatgctcaat 360

aaatttacct acaaaatgct cct 383

<210> 1770
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h04b1

<400> 1770

cgtactctca atcttgtttc gtaagaaaat gtgaaaagaa tataaagatt tgaacaattt 60

tattcctgtt tcttacaagc ttagagcaat cataatacat aacgattgta aaacagtaca 120

gagaaaagtt cttgtcatat ttttacatac ttaatctgaa gttttcttgt tctttcttgt 180

ttaaggttga gaagaaatca acagagacac aagcaaagaa gcaacgattg taaacattaa 240

aattccaata tgattcactc cgttactcat cactacttgg ttttctgtat gtacaacaga 300

gataataatc atagctatgg actatggttc aagcttcatc tgaagcgttg gctcagaacc 360

tgcaacataa agatacgaga ctttaacaac ataagagata gttctatagt ttcgatagac 420

gaatttgctt c 431

<210> 1771
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h05b1

<400> 1771

aaggatttct ttatgaacac aaggtagtga actccatttg ttagaacagc ttccattgat 60

tctctgcact tatccctttt ttcgcgcttt gtaaactccg gtttgttcgc gtaaaccagg 120

atttggctca ggattgccca ttgttaattc cagggtttct ctgaatttga aagttatcac 180

ttagtaggtt tccataccaa ggctcaatcc aattaagtcc gtagcgtcta ccaattccgc 240

catatcccct tttttaggat ctcattatga tgtctttcct tttttttctt atgccgaaac 300

ctcgggattc attacattat agatacttat tttatgtctt tgctatcttc ttttattttt 360

ttgagctcca tccatattga tttagtctaa tcaacaaaga ttctatcatt tttgtatttg 420

caattcaata tggttatata ttacataaca tatatatgtt ctttttttt 470

<210> 1772
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h06b1

<400> 1772

agtatataac ataggtgcga agttaaaaaa tgcaggtggg actattgaac gtggatggat 60

tctacgattc actattgacg tttatagggg aggcagtgga cgaaggcttc gtctcctcca 120

ccgctcgccg tatcattgtc tcggctccaa acgctcctca attacttcaa cttcttgagg 180

ttttttttatt tgcctttcat tacttttga ttattctatt taatactata gactaaatga 240

acgaatccca aaataggata attaaattaa ttgaattcat ttgtaatcgc aggagtatgt 300

tccaaaacac gacgattttg tattcaaaat ggtgtgggac aataccacgg atgctttcac 360

tttggaaggc gactcgtttt agatataggt catttgtatc ttagtctact tttattttat 420

tattaaaaat ctcggttttt attggccatt tcaaattttt gattt 465

<210> 1773
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h09b1

<400> 1773

cattttgacc acggaaacac taacaaagct attgactact tttatataat gttttgttcg 60

ttttagcctc tggggacact taatgggtat aaacgtattc taaacactcc taatccatct 120

ttaactcttc ttattagtca aatgcattgg attttgacac atattgacca tagaaaaacc 180

aacaaagcta ttgactgctt ctaataaatg ttttgttggt tttagcctct tttggaggaa 240

aatgggtata aatgttgtct aaatactcct actccatctc taactcttac gattagtcaa 300

atgaaatgga ttgtgaaaca tttttaccat agaaacacta acaaagctat ttatttcttc 360

taagcaattt ttttgtttgt gttagcctct tttgggacaa aatgggtatt agtgctgtct 420

aaacactcct aatccatctt taacacttat aattaggcaa atgaattaca ttgtgacaca 480

tttgaacata gaaacactaa caaagctatt aact 514

<210> 1774
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316057h12b1

<400> 1774

tttttcttca gtacaggact aatgtttgcc aagtttcaac aataccttc ccggggccaa 60

cattggggat ttcaaatttg cgtgggtttg ccttaagaag agctctaaca tgagcatcaa 120

ccaaatcagt gacatcaatg tggatcccgt acgcaagttc catcaccggt tttgcagtct 180

ggtccttga tctggggaaa aagaaaagtt aaatgaatat caatgattag agaagcttga 240

aagcttatag ccatgtgcat gtaacaagga gactaattta aacactgctt taataaagga 300

aactcaagaa ttacgtggct caattatgta ttttgctcag ctggaaacta taactactta 360

tcagctcttt tacacgcatg t 381

<210> 1775
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316001a04b1

<400> 1775

cccgcaccta gcaaatggtc cgccaagaaa gccaactgac gggattgcac atgttcagac 60

acagtaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc gcccagatcc 120

caatgacgag ctagtggacg atgtccacca cgttgcagtc gcgccatggg ccccgaatgc 180

gaaccccggc gacatggcct g 201

<210> 1776
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl19316001c01b1

<400> 1776

ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt tatagccaag 60

ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca aatcccaaaa 120

cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc taccttttct 180

tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc aaagtataag 240

cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga gacactatct 300

gtgccgttac gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt gaaagaaagt ctaggtctgg gtttgggtta actgctctaa 420

taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga aaatccaagt 480

attttacggt atgcatgagt tcaaatttga tgcagacatg at 522

<210> 1777
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c02b1

<400> 1777

ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt tatagccaag 60

ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca aatcccaaaa 120

cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc taccttttct 180

tatcattgaa tcaaccccctt ttttttttttg ttttaaacac atcccaaccc aaagtataag 240

cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga gacactatct 300

ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta actgctctaa 420

taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga aaatccaagt 480

attttacggt atccatgagt tcaaatttga tgcagacatg ataattaaag attagattca 540

ggttcaaatt gata 554

<210> 1778
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c03b1

<400> 1778

taacctcaaa gcgcccagat cccaatgacg agctcgccga cgatgtccac cacgttgcag 60

tggcgccatg ggccccgtat gcgaaccccg ttgacatggg ctggtccgct gggccggtgc 120

tgagatccgg ggacttgtcc cat 143

<210> 1779
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c05b1

<400> 1779

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgttc 60

agacaaagtt ttgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtt gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gactggtccg ctgtgccggt actgtgatcc ggcgacttgt 240

cccattcgac catcca 256

<210> 1780
<211> 506
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c06b1

<400> 1780

agcggatttg gatttcttta acaactaagg ttcctgtttt taacatttta aagccaaggg 60

cttttgccca tctccaatag ctaacaagaa ctctttcttt tctttacaaa tcccaaaacc 120

tttactagac ttttttctgct tctttagctt acttcaccta gagtcttcta cctttttctta 180

tcattgaatc aaccccttttt ttttttttctt ttaaacacat cccaacccaa agtataagcg 240

cccacctagt cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct 300

gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc 360

acaagttata tagggcttga aagaaagtct aggtttgggt ttgggttaac tgctctaata 420

aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaataagaaa atccaagtat 480

tttacggtat ccatgagttc aaattt 506

<210> 1781
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001d01b1

<400> 1781

ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt taaagccaag 60

ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca aatcccaaaa 120

cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc tacctttttct 180

tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc aaagtataag 240

cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga gacactatct 300

ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta actgctctaa 420

aaggagagtc agctacttgg attaaaaaga gtgatcaaaa tgaataagaa aatccaagta 480

ttttacggta tgcatgagtt caaatttgat gcagacatga ta 522

<210> 1782
<211> 544
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001d02b1

<400> 1782

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggttctgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaag 544

<210> 1783
<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001d05b1

<400> 1783

tcgtccacgc gtccgtccac gcgtgcgagc cgacaaccca agcaaacaaa ctatggccgc 60

cgctccttcc cccgccgtcg ccgccgtcag cagcagcgcg ccctcgacgg ggctcctgcc 120

gccgcggcgc agcaccgtcc cgctgtcgtc gatgaggagc gcggcgccgg gcggtaggat 180

ggcgaccgtg gcgcgcgcgg agggccacgt gggggccgtg ggcaacacgt acctc 235

<210> 1784
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001d06b1

<400> 1784

aaagccaact gacggcattg cacatgtgca gacaaagata tgctgctgct gctattcaac 60

gagatcgatt ctaacctcaa agcgcccaga tcccaatgac gagctcgtcg acgatgtcca 120

ccacgttgca gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt 180

tgtgccggta ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc 240

gtcggcgctt cagagcttcg ccgtgaccct gcaacaggtg gcccttcga agctgtccag 300

ccacagtcgc agcggcattc agatcctggt tctggacgtt gctcccttc cgctagacac 360

ggtgttcgtc aacctggaga gcgaattgac aaaacggctg gagagcggtg agggcacctt 420

ttacaaggac c 431

<210> 1785

<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e03b1

<400> 1785

cactttgttc atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

ttttaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acattccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctatgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccat gtattttacg gtatgcatga gtt 513

<210> 1786
<211> 492
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e04b1

<400> 1786

gtgttctccg acctcttccc gcacctagca aatggttagc caagaaagcc aactgacggt 60

attgcacatg tgcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgacggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt tcagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttgcgatag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggtgagggca ccttttacaa ggaccatacg 480

acaagcccca at 492

<210> 1787
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e05b1

<400> 1787

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttttagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acattccaac 240

ccaaagtata agcgcccacc tagctctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctatgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtatgggt 420

taactgctct aataaggaga gtcagctact tggattaa 458

<210> 1788
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001f03b1

<400> 1788

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgttctcgac gttgctcccc ttgcgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gtgagggcac cttttacaag gaccatacga 480

caagccccaa tgccaaggac gttgccaaca tgacgcccga ggagcg 526

<210> 1789
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001f05b1

<400> 1789

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctatgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc atgtatttta cggtatgcat gagttcaaat ttgatgcaga catgata 537

<210> 1790
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001g01b1

<400> 1790

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgtgca 60

gacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct agccctcctc gagggcgcta cagagctcta gccggaccct 300

gcaacaggtg gcccccttcga agctgctcag ccacagccgc agcggcattg agatcc 356

<210> 1791
<211> 365
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001g02b1

<400> 1791

tctccgacct cttcccgcac ctagcaaatg gtaagccaag aaagccaact gactgtattg 60

cacatgtgca gacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgttg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgac ccattcgacc atacagttct cgccctcctc gtcggcgctt cagagctttg 300

ccgtgaccct gcaacaggtg gccccttcga agctgttcag tcacagtcgc agcggcattg 360

agatc 365

<210> 1792
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001g05b1

<400> 1792

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttataagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaaaaggag agtcagctac ttgga 455

<210> 1793
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001g06b1

<400> 1793

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cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc 300

ctgcaacagg tggccccttc gaagctgttc agccacagcc gcagcggcat tgagatcctc 360

<210> 1794
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h01b1

<400> 1794

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgttc 60

agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagctct gccgtgaccc 300

tgcaacaggt ggccccttcg aagctgttca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctaccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagcggc gagggcacct tttacaagga ccatacgaca agccccaatg 480

ccaaggacg 489

<210> 1795
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h02b1

<400> 1795

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ttttaagcca agggcttttg cccatctgca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctatgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatg 524

<210> 1796
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001h03b1

<400> 1796

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taacatttta taagccaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga 540

taattaaaga t 551

<210> 1797
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001h04b1

<400> 1797

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ttgcacattt gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gacc 474

<210> 1798
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002a02b1

<400> 1798

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaag 469

<210> 1799
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002a04b1

<400> 1799

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

<210> 1800
<211> 556
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002a05b1

<400> 1800

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattc 556

<210> 1801
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002a06b1

<400> 1801

ttctccgact ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cttacaaatt taatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa t 491

<210> 1802
<211> 567
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002a07b1

<400> 1802

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcttacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccaaggac gttgccaaca tgacgcccga ggagcgtcta gccacggcgc 540

tcagggcagc tctcagcacc ctcaaga 567

<210> 1803
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002a11b1

<400> 1803

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccaca 348

<210> 1804
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002a12b1

<400> 1804

ttctccgact ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cttacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaacggct ggagagcggc gagggcacct ttta 464

<210> 1805
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b02b1

<400> 1805

gttctccgat ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgat tagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg 380

<210> 1806
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b03b1

<400> 1806

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaact 428

<210> 1807
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b05b1

<400> 1807

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgagc ttacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga c 471

<210> 1808
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b07b1

<400> 1808

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggtatt gcacatgagc 60

ttacaatgta atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca agccccaatg 480

ccaaggacgt tgccaacatg acgcccgagg agcgtctag 519

<210> 1809
<211> 564
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b08b1

<400> 1809

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaatgcc aactgacggc 60

attgcacatg agctgacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgacgcccg aggagcgtct agccacggcg 540

ctcagggcag ctctcagcac cctc 564

<210> 1810
<211> 565
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002b09b1

<400> 1810

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

agggcagctc tcagcaccct caaga 565

<210> 1811
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002c01b1

<400> 1811

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagc 448

<210> 1812
<211> 615
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002c07b1

<400> 1812

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggttcg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attcaggttc aaattgatag ggaatggatc agatcatgac agtgtggccg 600

agtagagcaa tctaa 615

<210> 1813
<211> 556
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002c08b1

<400> 1813

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaat ttcaagggct ttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattca 556

<210> 1814
<211> 542
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002c11b1

<400> 1814

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggctaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagacaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

at 542

<210> 1815
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d01b1

<400> 1815

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga 550

<210> 1816
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d02b1

<400> 1816

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ctgtttttaa cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

ttt 423

<210> 1817
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d03b1

<400> 1817

caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt cctgttttta 60

acattttaat gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctaa ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag 450

<210> 1818
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d04b1

<400> 1818

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gcttgggcta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaata 477

<210> 1819
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d08b1

<400> 1819

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgagc ttacaaagta atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgc cccattcgtc catgcccacc tagtcctatt tagtgcggct aaagagatct 300

agcgcgaccc tggaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agcccca 487

<210> 1820
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002d09b1

<400> 1820

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatttc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg ctcgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 1821
<211> 530
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002d12b1

<400> 1821

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgctcatga gctgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccaaggac gttgccaaca tgacgcccga ggagcgtcta 530

<210> 1822
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e01b1

<400> 1822

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagc 449

<210> 1823
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e04b1

<400> 1823

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagggccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

ga 422

<210> 1824
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e05b1

<400> 1824

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcttacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccg 479

<210> 1825
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e06b1

<400> 1825

ccaagaaatg ccaactgacg gcattgcaca tgagcttaca aatttatgct gctgctgcta 60

ttcaacgaga tcgagttcta acctcaaagc gcccagatcc caatgacgag ctcgtcgacg 120

atgtccacca cgttgcagtc gcgccatggg cc 152

<210> 1826
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e07b1

<400> 1826

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgagc ttacaaatat aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gatctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat 490

<210> 1827
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002e08b1

<400> 1827

ttctccgact ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cttacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagggccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcg 286

<210> 1828
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002e09b1

<400> 1828

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaattt caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gctcgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga 550

<210> 1829
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316002e10b1

<400> 1829

cttgcttgct ccggccatcg accatggagg gcgaggcgcc gcagtcgcac cagctgctcc 60

tgcacggcgt cagcctggac ctgcgcctcg acacggccac ggccacgcac cagctgcgcg 120

gcgcccggcg cccggcgtcc cctgcgccta ctcccgtggc cttcgaccag gccggcaagg 180

aggccttctc ctgcaactac tgccaccgca agttcctcag ctcgcaggcg ctcagcggcc 240

accagaacgc ccacaagctc gagcgcaccc tcgccaagcg cagccgcgac gcctcctcca 300

ccgccgccac ggcagctcaa actgccacgc cttcctctca ctggccccac gccggcggcg 360

gngagctctg ggcgtactct gcttcggccg ctgccccgga ttccacgacg atggcgcccc 420

tgatgggcat gggct 435

<210> 1830
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002e11b1

<400> 1830

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgttttaa 60

cattttaaat ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggctaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attc 554

<210> 1831
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002f02b1

<400> 1831

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagaa cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagc 449

<210> 1832
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002f05b1

<400> 1832

tccgactctc ttcccgcacc tagcaaatgg taagccaaga aagccaactg acggcattgc 60

acatgagctt acaattataa tgctgctgct gctattcaac gagatcgatt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctcccttc cgctagacac ggtgttcgtc aacctggaga 420

gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac c 471

<210> 1833
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002f06b1

<400> 1833

gctgctgctg ctattcaacg agatcgagtt ctaacctcaa agcgcccaga tcccaatgac 60

gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa tgcgaacccc 120

gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc ccattcgacc 180

atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct gcaacaggtg 240

gcccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt cctcgacgtt 300

gctcccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac aaaacggctg 360

gagagcggcg agggcacctt ttacaaggac catccgacat gccccaatgc caaggacgtt 420

gccaacatga cgcccgagga gcgcctagcc acggcgctca gggcagctct 470

<210> 1834
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002f09b1

<400> 1834

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcttatgag cttacaaaga aatgctgctg ctgctgttca acgagatcga ttctaacggc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg ca 172

<210> 1835
<211> 614
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002f12b1

<400> 1835

tttagatcat gtggctggat ttcatcatta aaacctcact gcttgtttcc tgaaaccaca 60

ggtgttgaac atatggggat actatccact cattctaata ggatcatggg cattcggcac 120

tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagttct 180

tgacgttggg acagctgcac taatggtagc aaacctatca aataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagtgcg tcgagcaatc catgagagac 360

tggagctgta agtcaccacc gatctctttg gtttgctata ttattcccaa taatcaatga 420

agcttgattt ttatgaaacc cttggtctgc tagattcttg ccagaacggc tatatcgatg 480

gcttccaagc aatttcagac caaaaaacca tctgattcta catcagcaac aacaacagcg 540

aagcgaaatg gtatcactca agaccgagga ccagcaatga cactaacttt caactaatac 600

attggaccga taac 614

<210> 1836
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002g02b1

<400> 1836

ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt taaagccaag 60

ggcttttgcc catctccaga tagctaacaa gaactctttc ttttctttac aaatcccaaa 120

acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttc 180

ttatcattga atcaacccct ttttttttt ctttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttggg 408

<210> 1837
<211> 444
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316002g03b1

<400> 1837

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgctcatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctn cgtctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tgga 444

<210> 1838
<211> 554
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002g07b1

<400> 1838

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaatgt tcaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggctaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attc 554

<210> 1839
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002g08b1

<400> 1839

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaatcc aagggctttt gcccatctcc aagagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg ctcgaaagaa agtctaggtt tgggttcggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg a 511

<210> 1840
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002g10b1

<400> 1840

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

<210> 1841
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002g11b1

<400> 1841

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggctcgaaag aaagtctagg tttgggtttg 420

ggctaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attca 555

<210> 1842
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002g12b1

<400> 1842

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gctaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttc 516

<210> 1843
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002h01b1

<400> 1843

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggataa aaagagtgat caaaatgaat 480

aagaaaat 488

<210> 1844
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316002h02b1

<400> 1844

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca gcgagatcga ttctaacctc 120

aaggcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgggacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc g 371

<210> 1845
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h03b1

<400> 1845

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg c 391

<210> 1846
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h05b1

<400> 1846

tttggatttc tttaacaact aaggttcctg tttttaacat tttaaattca aggttttttg 60

cccatctcca atagctaaca agaactcttt cttttcttta caaatcccaa aacctttact 120

agacttttttc tgcttcttta gcttacttca cctagagtct tctacctttt cttatcattg 180

aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaaagata agcgcccacc 240

tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat ctctgtcgtt 300

acgaacctaa cactt 315

<210> 1847
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h07b1

<400> 1847

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 1848
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h08b1

<400> 1848

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgctcatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gac 513

<210> 1849
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h11b1

<400> 1849

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgat 524

<210> 1850
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316002h12b1

<400> 1850

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaa 405

<210> 1851
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a01b1

<400> 1851

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ctaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac g 501

<210> 1852
<211> 568
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a02b1

<400> 1852

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaatgc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttcaggttca aattgata 568

<210> 1853
<211> 556
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003a06b1

<400> 1853

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattc 556

<210> 1854
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003a07b1

<400> 1854

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctag caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat tt 522

<210> 1855
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a08b1

<400> 1855

gccaagaaag ccaactgacg gcattgcaca tgatttgaca atgaaatgct gctgctgcta 60

ttcaacgaga tcgattctaa cctcaaggcg cccagatccc aatgacgagc tcgtcgacga 120

tgtccaccac gttgcagtcg cgccatgggc cccgaatgcg aaccccgtcg acatggcctg 180

gtccgttgtg ccggtactgc gatccggcga cttgtcccat tcgaccatcc agttctcgcc 240

ctcctcgtcg gcgcttcaga gcttcgccgt gaccctgcaa caggtggccc cttcgaagct 300

gtccagccac agccgcagcg ggattgagat cctcgtcctc gacgttgctc cccttccgct 360

agacacggtg ttcgtcaacc tggagagcga attgacaaaa cggctggaga gcggcgaggg 420

caccttttac aaggacca 438

<210> 1856
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a09b1

<400> 1856

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaatccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt g 391

<210> 1857
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a10b1

<400> 1857

cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatga tttgacattt 60

aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc agatcccaat 120

gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac 180

cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt gttccattcg 240

accatccagt tctcgccctc ctcgtcggcg cttcacagct tagccgcgac cctgcaacag 300

gtggcccctt cgaagctgtc cagccacagc cgcagcggca ttgagatcct cgtcctcgac 360

gttgctcccc ttgcgctaga cacggtgttc gtcaacctgg agagcgaatt gacaaaacag 420

ctggagagc 429

<210> 1858
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003a11b1

<400> 1858

caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt cctgttttta 60

acattttaat gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgata 539

<210> 1859
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003a12b1

<400> 1859

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttctttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attca 555

<210> 1860
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003b01b1

<400> 1860

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tcccaaaacc tttactagac ttttttctgct tctttagctt acttcaccta gagtcttcta 180

ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat cccaacccaa 240

agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa ctacatgaga 300

cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc 360

acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt ttgggttaac 420

tgctctaata aggagagcca gctacttgga ttaaaaagag tgatcaaaat gaataagaaa 480

atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat aattaaag 538

<210> 1861
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b02b1

<400> 1861

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cg 502

<210> 1862
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b03b1

<400> 1862

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaattcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agtt 514

<210> 1863
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b04b1

<400> 1863

cttacgcgtg cggcaccttg agcttgaggt cagtggcagg caggcaagca agaaagtaag 60

aagaagaaga agataggaca tggcatctgc tactctcctc aagtcctact tgctccccaa 120

gaaggccgaa tggggcgtcg cgcgccaggt cgccgccccg agggtgtcca tggtcgtccg 180

cgccggcgcc tacgacgatg agctcgtcaa gaccgcgaaa accatcgcgt cgccggggcg 240

cgggatcctg gccatggacg agtgcaacgc cacctgcggg aagcgcctcg actcgatcgg 300

cctggagaac acagaggcga accggcaggc gttccgcacg ctgctggtct tcgtccctgg 360

cctcggcaac cacatcttcg gcgccatgct cttcgaggag acgctctacc ag 412

<210> 1864
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b05b1

<400> 1864

gttctccgat ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgctcatgag ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagggccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgtttc gtaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc tttt 464

<210> 1865
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b06b1

<400> 1865

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgttcatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcgggat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gac 513

<210> 1866
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003b07b1

<400> 1866

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg ttttttaacat 60

tttaaatcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataattaa 540

agattagatt c 551

<210> 1867
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003b09b1

<400> 1867

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa ttccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catga 515

<210> 1868
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003b10b1

<400> 1868

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taattccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgat 466

<210> 1869
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003b11b1

<400> 1869

ttgcacatga gttgacattg aaatgctgct gctgctattc aacgagatcg attctaacct 60

caaggcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 120

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 180

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcg 227

<210> 1870
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003b12b1

<400> 1870

ttctccgttc tcttcccgca cctagcaaat ggtaagccaa gatagccaac tgactgcatt 60

gttcatgagt ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagcccca 488

<210> 1871
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c01b1

<400> 1871

gatttaccga tccaaagggt ttcaagcttg agttccactt caataccaat ccattcttca 60

agaatgaagt gcttacgaaa acgtaccaca tgatcgatga agatgaacca atccttgaga 120

aggccattgg tactgaaatt gaatggtgcc ctggaaagag cttgacacaa aaggtgctaa 180

agaagaagcc aaagaagggg tcaaagaaca ctaaacctat cacgaagatt gaaaattgcg 240

agagcttctt taatttcttc agtccacctc aagttcctga tgatgatgag gaaattgatg 300

aggatacagc tgaacagttg cagaaccaaa tggagcaaga ttatgatatt ggatctacca 360

tcagagacaa gattattcca catgctgttt catggttcac tggag 405

<210> 1872
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c02b1

<400> 1872

cactttgtac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttac 499

<210> 1873
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003c06b1

<400> 1873

ccatctaatg tctttattaa tatgaactag aatcctgcgc catgcaggat tttgtttacc 60

tgctgctacg atagtcacac ctactgcatg cgcaaaggca agtgtcgaga tcacatttgg 120

ttgctgagtg ttgggagtca aaaattgatg ttggggattt gtatttttac cgtgtaagag 180

tagggtcggc atctatctat ctatagaata aggcctccag ttgcaatctg atggttgtat 240

catctccaca ctggagcatg tacttgtatc cccgtggcgc aaatttgtgc aacctatcta 300

tattgtactt atttgtcccc aaacattgtg atgataattt tta 343

<210> 1874
<211> 592
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003c07b1

<400> 1874

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat ga 592

<210> 1875
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c08b1

<400> 1875

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgagt 60

agacaatgaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaacaggt ggcccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagc 437

<210> 1876
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c10b1

<400> 1876

atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat tttaaatcca 60

agggcttttg cccatctcca atagctgaca agaactcttt cttttcttta caaatcccaa 120

aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct tctacctttt 180

cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac ccaaagtata 240

agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat 300

ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac 360

actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgg 408

<210> 1877
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c11b1

<400> 1877

tgcacatgag ttttcattga aatgctgctg ctgctattca acgagagcga ttctaacctc 60

aaagcgccca gatcccaatg acgagctcgt cgacgttgtc caccacgttg cagtcgcgcc 120

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 180

cggcgacttg ttccattcga ccatccagtt ctcgccctcc tcgtcggcg 229

<210> 1878
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003c12b1

<400> 1878

aacactttgt tacatctagc gcgatttgga tttctttaac aactaaggtt cctgttttta 60

acatttttatt tccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat 490

<210> 1879
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d01b1

<400> 1879

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagtt 60

gacaatgtaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gccccttcga agctgttcag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccga 507

<210> 1880
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d02b1

<400> 1880

gctgctgctg ctattcaacg agatcgattt taaccttaaa gcgcccagat cccaatgacg 60

agctcgtcga cgatgttcac cacgttgcag tcgcgccatg ggccccgaat gcgaaccccg 120

tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc cattcgacca 180

tccagttctc gccctcctcg tcggcgcttc agagcttcgc cgtgaccctg ctacaggtgg 240

ccccttcgaa gctgttcagt cacagccgta gtggcattga gatcctcgac ctcgacgttg 300

ctcccc 306

<210> 1881
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d03b1

<400> 1881

ttctccgttc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgc 514

<210> 1882
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003d04b1

<400> 1882

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa ttccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

ctgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

a 541

<210> 1883
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d05b1

<400> 1883

ttctccgatc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gctcatgatt tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttaca 466

<210> 1884
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d07b1

<400> 1884

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctggt tttaacattt 60

taatgccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttte ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga t 521

<210> 1885
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d08b1

<400> 1885

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taatgccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttte ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaat 484

<210> 1886
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003d10b1

<400> 1886

aacctcactg cttgtttcct gaaaccacag gtgttgaact tatggggata ctatccactc 60

attctaatag gatcatgggc attcggcact attaaccgta tccatgattt catcgagcca 120

gggcataaga tcttctggct ctcagttctt gacgttggga cagctgcact aatggtagca 180

aacctatcaa ataaataagt tataaaattc gccatagatc atctttgctc ttcccgagtc 240

gatgttctga atgttgtatt ttcagggctt gttcaattca atagcctatg gtttcaacag 300

ctcagtgcgt cgagcaatcc atgagagact ggagctgtaa gtcaccaccg atctctttgg 360

tttgctatat tattcccaat aatcaatgaa gcttgatttt tatgaaaccc ttggtctgct 420

agattcttgc cagaacggct atatcgatgg cttccaagca atttcagacc aaaaaacca 479

<210> 1887
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003e01b1

<400> 1887

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagct 60

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tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa gccccaatgc 480

caaggacgtt gccaacatga cg 502

<210> 1888
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003e03b1

<400> 1888

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

<210> 1889
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003e05b1

<400> 1889

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tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

acctcgacgt tgctcccctt ccgttagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggc 429

<210> 1890
<211> 154
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003e09b1

<400> 1890

tgcacatgag ttgacaatga aatgctgctg ctgctattca acgagagcga ttttaacctc 60

aaagcgccca gatcccaatg acgagctcgt cgtcgatgtc caccacgttg cagtcgcgcc 120

atgggcctcg aatgcgaacc ccgtcgacat ggcc 154

<210> 1891
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003e10b1

<400> 1891

tagatcatgt ggctggattt catcattaaa acctcactgc ttgtttcctg aaaccacagg 60

tgttgaattg atggggatac tatccactca ttctaatagg atcatgggca ttcggcacta 120

ttaaccgtat ccatgatttc atcgagccag ggcataagat cttctggctc tcagttcttg 180

acgttgggac agctgcacta atggtagcaa acctatcaaa taaataagtt ataaaattcg 240

ccatagatca tctttgctct tcccgagtcg atgttctgaa tgttgtattt tcagggcttg 300

ttcaattcaa tagcctatgg tttcaacagc tcagtgcgtc gagcaatcca tgagagactg 360

gagctgtaag tcaccaccga tctctttggt ttgctatatt attcccaata atcaatgaag 420

cttgattttt atgaaa 436

<210> 1892
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003f01b1

<400> 1892

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attttaatgc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttc 553

<210> 1893
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003f02b1

<400> 1893

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gtacatgagc 60

tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaac 306

<210> 1894
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f04b1

<400> 1894

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaag 465

<210> 1895
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f06b1

<400> 1895

ttctccgact ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgactgcat 60

tgcacatgag ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccc 388

<210> 1896
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f07b1

<400> 1896

catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca ttttattgcc 60

aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca 120

aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata agaaaatcca 480

agtattctac ggtatccatg agttcaaatt tgatgcagac atgataatta aagattagat 540

tca 543

<210> 1897
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f08b1

<400> 1897

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taatgccaag tgcttttgcc catctccaat agctgacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaacccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tc 362

<210> 1898
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f09b1

<400> 1898

ggctggattt catcattaaa acctcactgc ttgtttcctg aaaccacagg tgttgaactt 60

atggtgttac tatccactca ttctaatagg atcatgggca ttcggcacta ttaaccgtat 120

ccatgatttc atcgagccag ggcataagat cttctggctc tcagttcttg acgttgggac 180

agctgcacta atggtagcaa acctatcaaa taaataagtt ataaaattcg ccatagatca 240

tctttgctct tcccgcgtcg atgttctgaa tgttgtattt tcagggcttg ttcaattcaa 300

tagcctatgg tttcaacagc ttagtgcgtt gagcaatcca tgagagactg gagctgtaag 360

tcaccaccga tctctttggt tcgctatatt attcccaata atcaatgaag cttgattttt 420

atgaaaccct cggtctgcta gattc 445

<210> 1899
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f10b1

<400> 1899

cgactctctt cccgcaccta gcaaatggta agccaagaaa gccaactgac ggcattgcac 60

atgatctgac attgaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttcgc tagac 395

<210> 1900
<211> 464
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003f12b1

<400> 1900

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaattcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aaga 464

<210> 1901
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g01b1

<400> 1901

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg taacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acg 513

<210> 1902
<211> 549
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g02b1

<400> 1902

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tggtgcagac atgataatta 540

aagattaga 549

<210> 1903
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g06b1

<400> 1903

actttgttac atgtagcgga tttggatttc tttaacaact aaggttcctg tttttaactt 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggctt gggcttgggt 420

taactgctct aatacggaga gtcagctact tggattaaaa aga 463

<210> 1904

<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g07b1

<400> 1904

caagaactct ttcttttctt gtacaaatcc caaaaccttt actagacttt ttctgcttct 60

ttagcttact tcacctagag tcttttacct tttcttatca ttgaatcaac ccctttttt 120

ttttgtttta aacacatccc aacccaaagg gtaagcgccc acctagtcct atctagttcg 180

aaaaatgcga actagaacta catgagacac tatctctgtc gttacgaacc taacactatc 240

taccaagctt aatcggaata agagctcaca aacactcaca agttatatag ggcattgaag 300

aaa 303

<210> 1905
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g08b1

<400> 1905

gttctccgat ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgat cagacaatga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat g 491

<210> 1906
<211> 508
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g09b1

<400> 1906

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taatgccaat ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatga 508

<210> 1907
<211> 564
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003g10b1

<400> 1907

tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa cattttaatt 60

ccaatggctt ttgcccatct ccaatagcta acaagaactc tttcttttct ttacaaatcc 120

caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct 180

tttcttatca ttgaatcaac ccctttttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac 300

tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca 360

aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg ggttaactgc 420

tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa taagaaaatc 480

caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat taaagattag 540

attcaggttc aaattgatag ggaa 564

<210> 1908

<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003h01b1

<400> 1908

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagat 545

<210> 1909
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003h03b1

<400> 1909

cggatttgga tttctttaac aactaaggtt cctgttttta acttttaaa gccaagggct 60

tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tttctgcttc tttagcttac ttcacctaga gactgctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac 360

aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg ctctaataag 420

gagagtcagc tacttggatt aaaaagagtg atcaaaatga a 461

<210> 1910
<211> 349
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316003h04b1

<400> 1910

ggctcaggcg gtgcctagag gggaagaaat gatgacgaac aagagaagtc tgttcccagt 60

cctgcccttc aaggatctgg cgaactttta tctttttaac gttggaaggc aataatttct 120

gtagagggtg gattttccca acattcgttt ttggtggagg catcgaactc cagaggttgt 180

cgtaggttgg cggcagcgtt ctcaaaacat ttactatcat aggggttgag tttgagttcg 240

agtatgtgcc ctgaatcgtt actgggcaat tttccttaaa tacattgtcc tccaatccta 300

ctgagattat tatggtccaa gttnaaaaaa aaaaaaaacc caacatcat 349

<210> 1911
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003h05b1

<400> 1911

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

a 541

<210> 1912
<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003h08b1

<400> 1912

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagccaag ggcttttgcc catctccaat agctgacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga tgcagacatg ataattaaag 540

attaga 546

<210> 1913
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316003h09b1

<400> 1913

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa tgccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa t 491

<210> 1914
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003h10b1

<400> 1914

tttgttacat ctagcgcatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagccaag ggcttttgcc catctccaat agctgacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gt 412

<210> 1915
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316003h11b1

<400> 1915

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa agagtgatca aaatg 475

<210> 1916
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004a02b1

<400> 1916

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa t 491

<210> 1917
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004a04b1

<400> 1917

gtcaaatctt agcttgctac gctgcaagag gcagatacgt gatctcagca agcgagaact 60

cccatgtgta cgtgtggaga aacgacgaca gccctgagca aagaagcagc agcagcaagg 120

gcgtcgtgtc tgtcgcaaac tcctacgagt acttctactg ccgggacgtg acggtggccg 180

ctgccttgcc atccacggcg gggtcagcgg cgacgtcccg gaccaactcc aggaggaagc 240

accaggagct ggattgtgtg tccgagtatc ctctgccgca cgcaggagac ggagattcct 300

ctgatttcca gcggcagcag agccgcaatg acctaagcaa cggttcgaac cacagcggcg 360

gtgac 365

<210> 1918
<211> 407

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004a05b1

<400> 1918

gtgagcgaga aatccccaat ccccaccaaa ccctaaccca aaccctaacc ctgattgaaa 60

cgaccaggag aggagaggag aggagcggat ccggcgatgg ccgtcgagaa gatgcacttg 120

tccatgccgt tgcccgccgg cttggagggt ttccccttca ccacgttcca ggcggagctg 180

gaggccttca ccgtcaagtt gagggcggag gcgaagaagg ccaaggccaa gccggaggtc 240

aaggaggcca aggccaagga ggagaaggcc aagccggagg tcaaggccaa ggtgaagaag 300

gccaaggcga aggaggccaa gccggaggtc gaggccaagg caaaggaggc caaggcaaag 360

gaggccaagg cgaaggaggc caagccggag gtcgaggcca agtcaaa 407

<210> 1919
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004a08b1

<400> 1919

agcggatgtg gattccttta acaactaagg gtcctgttct taacattcta aagccaaggg 60

ctttggtcca tctccaatag ctaacacgaa ctctttcttt gctttacaaa tcccaaaacc 120

tttactagac tttatctgct tctttagctt acttaaccta gagtcttcta ccttttctta 180

tgattgaatc aaccaccttg ttttttttc tgttaaacac ataccaaccc aaaggataag 240

cgcccaccta gtgctatcta gtccgaaaaa tgcgaactag aactacagga gacactatct 300

ctgttgttac gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt 380

<210> 1920
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004a11b1

<400> 1920

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

a 541

<210> 1921
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316004a12b1

<400> 1921

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tc 552

<210> 1922
<211> 313

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004b02b1

<400> 1922

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatgcc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atc 313

<210> 1923
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004b03b1

<400> 1923

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttat tgccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtct 409

<210> 1924
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004b04b1

<400> 1924

gacttttttct ggttctttag cttacttcac ctagaggctt ctaccttgtc ttatcagtga 60

atcaacccct ttttttttg cttttaaaca catcccaacc caaagtataa tgcgcccacc 120

tagtcctatg ctagtccgaa aaatgcgaac tagaactaca tgagacacta tctatgtggt 180

tacgaaccta acactctcta ccaagcttaa tgggaataag accttacaaa cactcacaag 240

ttata 245

<210> 1925
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004b07b1

<400> 1925

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgtgc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacag 318

<210> 1926
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c03b1

<400> 1926

cttcccgcac ctagcaaatg gtgagccaag aaagccaact gacggcattg cacatgagtc 60

agacaattaa atgctgctgc tgctattcag cgagatcgat tctaacctca aggcgcccag 120

atcccaatga cgagctcgtg gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtgggcgct tcagagcttc gccgtgaccc 300

tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tgctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggtt ggagagcggc gagggcacct tttacaagga cc 462

<210> 1927
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c04b1

<400> 1927

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttattg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa ttt 523

<210> 1928
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c05b1

<400> 1928

tttcgagcgc ctcctcctgt ctcgtcctcg tgccccgtcc cctcgtcggc gcccgatcta 60

agtcaagatg agtcgtggcg ggagtgctgg tggtggtcaa agttctctgg gttacctgtt 120

tggagatggc gagcctgcaa agcctgctgc agcaccagct gcgaagcccg cacctgctga 180

gaaaccagca ccggcagctg ctgatgtagc caagcagatt ccagctggca ttccaggtag 240

ccgggcgaac aactattacc gtgcagatgg ccagaacacg ggcaacttgc ttacggaccg 300

tgcttcaacc aaggttcatg ctgctcctgg cggtggctcg tccctgggct acttgtttgg 360

cggaaagtga tgttaatgat 380

<210> 1929
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c08b1

<400> 1929

tttagatctt gtggctggat ttcatcatta aaacctcact gcttgtttcc tgaaaccaca 60

tgtgttgaac agatggggat actatccact cattctaata ggatcatggg cattcggcac 120

tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagttct 180

tgacgttggg acagctgcac taatggtagc aaacctatca aataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagtgcg tcgagcaatc catgagagac 360

tggagctgta agtcaccacc gatctctttg gtttgctata ttattcccaa taatcaatga 420

agcttgattt ttatgaaacc cttggtctgc tagattcttg ccagaacggc tatatcgatg 480

gcttccaagc aatttcagac caaaaaacca tctgattcta catcagcaac aacaa 535

<210> 1930
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c09b1

<400> 1930

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga tcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac ctttttacag gacca 475

<210> 1931
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004c12b1

<400> 1931

gctgctgctg ctattcaacg agatcgattc taacctcaaa gcgcccagat cccaatgacg 60

agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat gcgaaccccg 120

ttgacatggc ctggtccgct gtgccggtac tgtgatccgg cgacttgtcc cattcgacca 180

tccagttctc gcccttctcg tgggcgcttc agagcttcgc cgtgaccctg caacaggtgg 240

tcccttcgaa gctgctcagc cacagccgca gcggcattga gatcctcgac ctcgacgttg 300

ctccccttcc gctagacacg gtgttcgaca acctggagag cgaattga 348

<210> 1932
<211> 558
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004d04b1

<400> 1932

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcag 558

<210> 1933
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004d05b1

<400> 1933

ctctaacact ttgttcatct agcggatttg gatttcttta acaactaagg ttcctgtttt 60

taacatttta atgccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aaccccttt ttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaattt 526

<210> 1934
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004d06b1

<400> 1934

gttctccgtc ctcttcccgc acctagcaga tggtaagcca agaaagccaa ctgactgcat 60

tgcacatgtt cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccctc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccct tgcgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg acc 473

<210> 1935
<211> 186
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004d12b1

<400> 1935

tgctgctgct gctattcaac gagatcggtt ctaacctcaa agcgcccaga gcccaatgac 60

gagctcgccg acgatgtcca ccacgttgta gtcgcgccat gggccccgaa tgcgaacccc 120

gaagacatgg cctggtacga tgtgccggta ctgcgatcca cctacttggc ccattcgacc 180

atccag 186

<210> 1936
<211> 192
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004e02b1

<400> 1936

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatgcc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt tt 192

<210> 1937
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004e03b1

<400> 1937

cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatga 60

tcagacaatg aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac 300

cctgcaacag gtggcccctt cgaagctgtc cagccacagc ctgagcggca ttgagatcct 360

agtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt 420

gacaaaacgg ctggagagcg gcgagggcac cttttacaag gac 463

<210> 1938
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004e08b1

<400> 1938

gttctccgtc ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgtt cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaa 468

<210> 1939
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f01b1

<400> 1939

cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatga 60

tcagacaatg aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac 300

cctgcaaca 309

<210> 1940
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f02b1

<400> 1940

ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat tgcacatgag 60

cagacaatga aatgctgctg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc 300

ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc 360

gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacc 406

<210> 1941
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f03b1

<400> 1941

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgattc 60

agacaattaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accaccttgc agtcgcgcca tgggccccga 180

atgccaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgcccttct cgtgggtgct tgagagcttc gacgagaccc 300

tgctacaggt ggcccctttg aa 322

<210> 1942
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f04b1

<400> 1942

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aaggtctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatgcca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatt 539

<210> 1943
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f05b1

<400> 1943

acaacccact ctttaacaaa tttcacacgc tccctgcatt tcgtgttctc cccaaatata 60

ttactgcatc ttcacttcca cccccaccat attatcaccg caaaaatggt ggaccacggt 120

atatcctcac agctactcct atcacacagg ttatcataga gccattcaaa cagagatttc 180

gaaaagaacc cctgctgcct ccttcgcggc acaaatctga cccaaatccc caattgagct 240

ggacagtctc taagcacgtg aagcacagat tcaactccac ctttacaaac ctgagacaca 300

ttcgaggcgc taagatgtct tcgatgccgt tcctcatctg tcataactat gtccagtttg 360

gttatatata ttttctggtt atacttat 388

<210> 1944
<211> 310
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316004f07b1

<400> 1944

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttatagcc aagggctttt gcccatctgc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta 310

<210> 1945
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316004f08b1

<400> 1945

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatagc caagggcttt tgcccatctg caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaa 485

<210> 1946
<211> 169
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316004f09b1

<400> 1946

caaagaaatg ctgctgctgc tattcaacga gatcgattct aacctcaaag cgcccagatc 60

ccaatgacga gctcgtcgac gatgtccacc acgttgcagt tcgcgccatg ggccccgaat 120

gcgaaccccg tcgatatggc ctgggccgtt gtgccggtac tgccatccg 169

<210> 1947
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316004f11b1

<400> 1947

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agcctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg aggtcaaatt tgatgcagac atgataatta 540

aagattagat tc 552

<210> 1948
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316004f12b1

<400> 1948

ccgcacctag caaatggtaa gccaagaatg ccaactgacg gtattgcaca tgattttaca 60

attaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg cccagatccc 120

aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc cccgaatgcg 180

aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga cttgtcccat 240

tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gctttgccgt gaccctgcaa 300

caggtggccc cttcgaagct gttcagccac agccgtagcg gcattgagat cctcgacctc 360

gacgttgctc ccctttcgct agacacggtg ttcgtcaacc tggagagcga attgacaaaa 420

<210> 1949
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005a02b1

<400> 1949

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataat 538

<210> 1950
<211> 542
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005a03b1

<400> 1950

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

at 542

<210> 1951
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005a08b1

<400> 1951

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga tctagacata gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacacaacg gctggagagc ggcgagggca ccttttacaa ggac 474

<210> 1952
<211> 518
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005a09b1

<400> 1952

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgatt 60

tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttt gccgtgaccc 300

tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca agccccaatg 480

ccaaggacgt tgtcaacatg acgcccgagg agcgtcta 518

<210> 1953
<211> 528
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005a10b1

<400> 1953

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa tgccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgat 528

<210> 1954
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005a12b1

<400> 1954

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagc 524

<210> 1955
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005b01b1

<400> 1955

ggttaagcga agatgtcggg gcgcggcaag ggaggcaagg gtctgggcaa gggcggcgcc 60

aagcgccacc ggaaggtgct gcgggacaac atccagggca tcaccaagcc ggcgatccgg 120

cgcctggcgc ggcggggcgg cgtgaagcgc atctcggggc tcatctacga ggagacccgc 180

ggcgtgctca agatcttcct cgagaacgtc atccgcgacg ccgtcaccta caccgagcac 240

gcccgccgca agaccgtcac cgccatggac gtcgtctacg ccctcaagcg ccagggacgc 300

accctctacg gattcggggg ctaggctccg gcgaggcgaa tcgagctcgc accacttgat 360

cagatgttca gattagcagt agctaggcgt tgttcagtgt tcacggtgat cgatgtaatt 420

tatgatgtat ggtg 434

<210> 1956
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005b04b1

<400> 1956

cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatga gttgacaaag 60

aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc agatcccaat 120

gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac 180

cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt gtcccattcg 240

accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac cctgcaacag 300

gtggcccctt cgaagctgtc cagccacagc cgcagcggca ttgagatcct cgtcctcgac 360

gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt gacaaaacgg 420

ctggagagcg gcgagggcac cttttacaag gaccatccga caagccccaa tgccaaggac 480

gttgccaaca tgacgcccga ggagcgtcta gcca 514

<210> 1957
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005b07b1

<400> 1957

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 1958
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005b08b1

<400> 1958

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgata 536

<210> 1959
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005b10b1

<400> 1959

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa tgccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agatt 555

<210> 1960
<211> 569
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005b11b1

<400> 1960

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attcaggttc aaattgata 569

<210> 1961
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005c01b1

<400> 1961

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgat 537

<210> 1962
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005c03b1

<400> 1962

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacttgagc tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaatcga caaaacggct ggagagcggt gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agc 523

<210> 1963
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005c06b1

<400> 1963

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaatgc caatggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataat 539

<210> 1964
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005c07b1

<400> 1964

caaatttaca cgctccctgc atttcgtgtt ctccccaaat atattactgc atcttcactt 60

tcacccccac catattatca ccgcaaaaat ggtggaccac ggtatatcct cacagctact 120

cctatcacac aggttatcat agagccattc aaacagagat ttcgaaaaga acccctgctg 180

cctccttcgc ggcacaaatc tgacccaaat ccccaattga gctggacagt ctctaagcac 240

gtgaagcaca gattcaactc caccttttaca aacctgagac acattcgagg cgctaagatg 300

tcttcgatgc cgttcctcat ctgtcataac tatgtccagt ttggttatat atattttctg 360

tttatactta tatttatata tatttttcct aaatataact attacttttg attatttgtt 420

aaacatgtcc atggatttaa ctcaatctca ataaat 456

<210> 1965
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005c11b1

<400> 1965

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgatct 60

gacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagctttg ccgtgaccct 300

gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgac aacctggaga gcgaattgac 420

aa 422

<210> 1966
<211> 588
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005c12b1

<400> 1966

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaatgc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttcaggttca aattgatagg gaatggtatc agatcatg 588

<210> 1967
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005d01b1

<400> 1967

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatt ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag att 553

<210> 1968
<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005d02b1

<400> 1968

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatt ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagacaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaaga 546

<210> 1969
<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005d03b1

<400> 1969

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaa 546

<210> 1970
<211> 544
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005d04b1

<400> 1970

cactttgtta cgtctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aaga 544

<210> 1971
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005d06b1

<400> 1971

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcttgacata gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggcccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggac 474

<210> 1972
<211> 588
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005d07b1

<400> 1972

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagcgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tcaggttcaa attgataggg aatggtatca gatcatga 588

<210> 1973
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005d12b1

<400> 1973

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgat cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc tttt 464

<210> 1974
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005e02b1

<400> 1974

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacttgagtt 60

tacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctcccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccgagga gcgtcta 517

<210> 1975
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005e05b1

<400> 1975

cgactctctg cccgcaccta gcaaatggtg agccaagaaa gccaactgac ggcattgcac 60

atgagtagac ttagaaatgc tgctgctgct attcagcgag atcgattcta acctcaaggg 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agctttgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgttct cgacgttgct ccccttccgg tagacac 397

<210> 1976
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005e06b1

<400> 1976

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tc 552

<210> 1977
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005e07b1

<400> 1977

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagtctgac aaagaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggtgagg gcacctttta caaggaccat ccgacaagcc 480

ccaatgccaa ggacgttgcc aacatgacgc ccgaggagc 519

<210> 1978
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005e08b1

<400> 1978

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacatgg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagc 524

<210> 1979
<211> 558
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005e11b1

<400> 1979

aacgctcaac actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg 60

tttttaacat tttaatgcca agggcttttg cccatctcca atagctaaca agaactcttt 120

cttttcttta caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt 420

gggtttgggt taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca 480

aaatgaataa gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca 540

tgataattaa agattaga 558

<210> 1980
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005e12b1

<400> 1980

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa tgccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

att 543

<210> 1981
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316005f01b1

<400> 1981

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gttgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgcc 494

<210> 1982
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f02b1

<400> 1982

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gttgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gac 473

<210> 1983
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f05b1

<400> 1983

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgatcttgac tttgaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggacca 469

<210> 1984
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f07b1

<400> 1984

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 1985
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f08b1

<400> 1985

acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac attttaatgc 60

caagggcttt tgcccatctc caatagctaa caagaactct ttctgttctt tacaaatccc 120

aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt cttctacctt 180

ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat aagaaaatcc 480

aagtatttta cggtatccat gagttcaaat ttgatgcaga catgat 526

<210> 1986
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f09b1

<400> 1986

acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac attttaatgc 60

caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt tacaaatccc 120

aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt cttctacctt 180

ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat aagaaaatcc 480

aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt aaaga 535

<210> 1987
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316005f12b1

<400> 1987

acgcttgcat cgtgctcgac ctcgaccccc tccctccccc ggccggcaat ccatggcgct 60

gcgcaacctg gccgggaagg tgcggatccc cacctctgct gctgcccggc tcccgatgcc 120

ccccacccgt gctgctttcc ggctcccatc ggaccctagc gttccgccgg cgaccgtttc 180

tcgggtcgag agcgccagag actggtacca gttccagcgg gcacgttatg atgatgtgac 240

aagagagttt agaaacttca ggcttgaggt tgtgcggtct gaaaaggagg ctaacct 297

<210> 1988
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a01b1

<400> 1988

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagct 60

gacaaagtaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctcccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccgagga gcgtctagcc a 521

<210> 1989
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a02b1

<400> 1989

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagtt 60

gacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggtgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccgagga gc 512

<210> 1990
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a03b1

<400> 1990

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttattgcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttc 514

<210> 1991
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a04b1

<400> 1991

ctcaacactt tgttacatct agcggatttg gatttcttta acaactaagg ttcctgtttt 60

taacatttta atgccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt tttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtt 415

<210> 1992
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a06b1

<400> 1992

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctggtattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgc 227

<210> 1993
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a08b1

<400> 1993

cgactctctt cccgcaccta gcaaatggta agccaagaaa gccaactgac ggcattgcac 60

atgagttgac aaagaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat ccgacaagcc 480

ccaatgccaa ggacgttgcc aacatga 507

<210> 1994
<211> 540
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a10b1

<400> 1994

acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac attttaaatc 60

caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt tacaaatccc 120

aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt cttctacctt 180

ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat aagaaaatcc 480

aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt aaagattaga 540

<210> 1995
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a11b1

<400> 1995

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaacccctt ttttttttte ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga t 521

<210> 1996
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006a12b1

<400> 1996

atttacgtcg cgcaccggcg ctccgacctc ttccgcgacc cctccgcggt cggcaagatc 60

accgcgatgg cctcggcgtg cagggcgcag gtggaggcgg aggagaggaa ggccagggat 120

gccaagagga aggcggcgga gctggagaag gcagcggcgg ccgagaagga gagggtggtc 180

aaggccgcgg ccgagaagga gaagcgggag agctcggtgg tgacggagga gcggggtgca 240

gggagctcgg cggagaagga tggcagcacg gaggtggaga agaaggagag caaggcgaac 300

aaaccaaatg ctggcaatgg tcttgatatg gagaagtatt cctggactca gcagttacca 360

gaggttaatg tcaatgttcc tgttcctgaa ggaacaaagt caaggt 406

<210> 1997
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b01b1

<400> 1997

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 1998
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316006b02b1

<400> 1998

ctctgtcctc ctcctgcccc tcccttctct cccctccgct cctcctcgcg cgcgcgcgtt 60

tttataaggg tttcggggcg cgggatggcc gacgacgaca gcgggagccc ccggggcggc 120

ggcggggtca gggagcagga ccgcttcctc cccatcgcca acatcagccg catcatgaag 180

aaggccgtgc cggccaacgg caagatcgcc aaggacgcca aggagaccct gcaggagtgc 240

gtctccgagt tcatctcctt cgtcaccagc gaggccagcg acaagtgcca gaaggagaag 300

cgcaagacca tcaacgggga cgatctgctc tgggccatgg ccacgctcgg attcgaggag 360

tacgtagacc ccctcaagat ctacctgcaa aagtacagag atatgga 407

<210> 1999
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316006b03b1

<400> 1999

atctagcgga tttggacttc tttaacaact aaggttcctg tttttaacat tttaatgcca 60

agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta caaatcccaa 120

aacctttact agacttttte tgcttcttta gcttacttca cctagagtct tctacctttt 180

cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata 240

agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat 300

ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac 360

actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggttcgggt taactgctct 420

aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaat 468

<210> 2000
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b05b1

<400> 2000

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttatca 60

ttttaatgcc aagggctttt gcccatctgc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tc 352

<210> 2001
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b07b1

<400> 2001

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt ctttttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatg 475

<210> 2002
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b08b1

<400> 2002

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgaca atgaaatgct gctgctgcta ttcaacgaga tcgattttaa ccttaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gttcagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggacc 467

<210> 2003
<211> 533
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b09b1

<400> 2003

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt ctttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tga 533

<210> 2004
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006b11b1

<400> 2004

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gatt 454

<210> 2005
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006c05b1

<400> 2005

ttaaaacctc actgcttgtt tcctgaaacc acaggtgttg aatttatggg gatactatcc 60

actcagtgta ataggatcat gggcattcgg cactattaac cgtatccatg atttcatcga 120

gccagggcat acgatcttct ggctctcagt tcttgacgtt gggacagctg ctctaatggt 180

agcaaaccta tcaaataaat aagttataca actcgccata gatcatcttt gctcttcccg 240

agtcgatgtt ctgaatgttg aattttcagg gcttgttcaa ttcaatagcc tatgggttca 300

acagctcagt gcgcttagca atccatgaga gactggagct gtaagtcacc accga 355

<210> 2006
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006c08b1

<400> 2006

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagct 60

tacattgaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaag 457

<210> 2007
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006d01b1

<400> 2007

tagcggattt ggatttcttt aacaactaag gttcctgttt ttaacatttt aaagccaagg 60

gcttttgccc atctccaata gctgacaaga actctttctt ttctttacaa atcccaaaac 120

ctttactaga ctttttctgc ttctttagct tacttcacct agagtcttct acctttttctt 180

atcattgaat caacccctttt ttttttttct tttaaacaca tcccaaccca aagtataagc 240

gcccacctag tcctatctag tccgaaaaat gcgaactaga actacatgag acactatctc 300

tgtcgttacg aacctaacac tttctaccaa gcttaatcgg aataagacct cacaaacact 360

cacaagttat atagggctcg aaagaaagtc taggtttggg tttgggttaa ctgctctaat 420

aaggagagtc agctacttgg attaaaaaga gtgatcaaaa tgaataagaa aatgcaagta 480

ttttacgggt atcatgag 498

<210> 2008
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006d07b1

<400> 2008

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgaca atgaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caat 484

<210> 2009
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006d10b1

<400> 2009

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtatttta 498

<210> 2010
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e02b1

<400> 2010

ctccgactct cttcccgcac ctagcaaatg gtgagccaag atagcctact gacggcattg 60

ctcatgagct gacaaagaaa tgctgctgct ggtattcaac gagatcgatt ctaacctcaa 120

agcgcccaga tcccaatgtc gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgat tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtgggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctccct 388

<210> 2011
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e04b1

<400> 2011

gatgctcttg ccttcagact cccgattaag gcccgacaga tatgcccttg agaagggcga 60

catgtctaaa tctggggcac acaagagcag gcttgaagaa caacaaagag ctgagaagaa 120

aattcgggac accaaggggg agcaatttac tccaaaatgg ttcaagatga cggaagacat 180

ctcccctacc ccgtggggcg acctggaggt gtatgaatac aatggcagat acgccgagca 240

ccgggctgcg atagacagct ctagcgtcgc tgccaaggag aaggacgtca gctccatcga 300

gttcaacccg tggcagtatg gcgacttgcc ttcccaatga tttcaatggg tctgaaacca 360

cccatatatt attttctcat cgaaaaagct atcaggcctt gtgctgatgc atac 414

<210> 2012
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e05b1

<400> 2012

ctcttcccgc acctagcaaa tggtatgcca agaaagccaa ctgacggcat ttttcatgat 60

cttgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac 300

cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca ttgagatcct 360

cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt 420

gacataacgg ttggagagcg gcgagggcac cttt 454

<210> 2013
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e06b1

<400> 2013

tctccgacct cttcccgcac ctagcaaatg gtatgccaag aaagccaact gacggcattg 60

tacatgagca gacaaagaaa tgctgctgct ggtattcaag gagatcgatt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacagg 318

<210> 2014
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e07b1

<400> 2014

acctagcaaa tggtaagcca agaaagccaa ctgacggtat tgtacatgag ctgacattta 60

aatgctgctg ctgctattca acgagatcga ttctaacctt aaagcgccca gatcccaatg 120

acgagctcgt tgacgatgtc caccacgttg cagtcgcgcc atgggccccg aatgccaacc 180

ccgtcgacat ggcctggtcc gatgtgccgg tactgcgatc cggcgacttg ttccattcga 240

ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc ctgcaacagg 300

t 301

<210> 2015
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006e11b1

<400> 2015

ttctccgact ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaaccgc tggagagcgg cgagggcacc ttttac 466

<210> 2016
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f01b1

<400> 2016

tcttcccgta cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgagc 60

tgacaaagta atgctgctgc tgctattcaa cgagatcgat tgtaacctca aagcgcccag 120

atcccaatga ctagctcgtc gacgatgtcc accaccttgc agtcgcgcca tgggccccga 180

atgccaaccc cgtctacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

ctcattcgac cat 253

<210> 2017
<211> 320

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f02b1

<400> 2017

gttctccgtc tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gctgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg ctttagagct 300

tcgccgtgac cctgcaacag 320

<210> 2018
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f04b1

<400> 2018

atctagcgga tttggatttc tttaacaact aagggccctg tttttaacat tgtatttcca 60

agggcttttg cccatctcca atagctaaca tgaactcttt cttttcttta caaattccaa 120

aacctttact agacttttte tgcttcttta gcttacttca cctagagtct tctacctttt 180

cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata 240

agcgcccacc tagtcctatt tagcccgaaa aatgcgaact agaactacat gagacact 298

<210> 2019
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f05b1

<400> 2019

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctgc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aaga 464

<210> 2020
<211> 510
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f07b1

<400> 2020

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgaca attgaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgtagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat tcgacaagcc 480

ccaatgccaa ggacgttgcc aacatgacgc 510

<210> 2021
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f09b1

<400> 2021

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgaca ttgaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gctcagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caatgccaag gacgttgcca acatgacgc 509

<210> 2022
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f10b1

<400> 2022

gatttcttta acaactaagg ttcctgtttt taacatttta atttcaattt ctttcgccca 60

tctccaatag ctaacaagaa ctctttcttt tctttacaaa tcccaaaacc tttactagac 120

tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatcttt gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctt acacacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttgg 394

<210> 2023
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006f11b1

<400> 2023

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaatgtca agggctttgg cccatctgca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctaccttgt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtggtt acgaacctaa cactttctac caagcttaat cggaataaga 360

ccttacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgg 418

<210> 2024
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g02b1

<400> 2024

agatgttcgt gttcgagaac ctgctggagc tcgaggatcg cgcgatccat atggtgctga 60

aggaagtcga atcggaaacg ctcatcatcg cgctgaaggg cgcaccgccc gcgctgcgcc 120

agaagttcct cgcgaacatg tcgcagcgtg cggccgaact gctcgccgag gatctcgacg 180

cgcgcggccc ggtgcgcgta tccgaagtcg agacgcagca gcgccgcatc ctgcagatcg 240

tgcgcaacct cgccgagagc ggccagatcg tgatcggcgg caaggcggaa gacgcgtatg 300

tctgattcgg cgagcgatcg cgcgggcacc ctcac 335

<210> 2025
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g03b1

<400> 2025

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ccaagggctt ttgcccatct ccaatagctg acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaa 403

<210> 2026
<211> 121
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g04b1

<400> 2026

gttctccgtc tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga tctgacaaag aaatgctgct gctgctattc aaggagatcg attctaacct 120

c 121

<210> 2027
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g06b1

<400> 2027

ctaacgctaa cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct 60

gtttttaaca ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt 120

tcttttcttt acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc 180

acctagagtc ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa 240

cacatcccaa cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac 300

tagaactaca tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa 360

tcggaataag acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt 420

tgggtttggg ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc 480

aaaatgaata agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac 540

atgataatta aagattagat tca 563

<210> 2028
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g07b1

<400> 2028

gcgggctgtt tgcgcaatgg cggcgggtcc cttcgcgctc cgcctagggc cgcgcctcgc 60

ggcgccggcc gtggcgagtg cgactagggg aggaggacgg ggaagtgacc gccctacggc 120

cagccgagcg ctggtgtcaa agaagtcaaa caaggaccac cgtttgtgga ttaggaaaga 180

cttggctggg tcagggaaga aggctctttg tcttgttaat actgtaacca agtggctgat 240

gagtaaaggt caggtgctga catggacaac gtacgataca ctgctgttgg ctctttctat 300

ggatggaaga gtagatgagg ctgagtcaat ttggaatact atcttacaaa cttatacacg 360

ctcagtgccc aagaagttgt tctctcggat gatccagatt tacaacacgc gcca 414

<210> 2029
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g08b1

<400> 2029

ttgttacatt tagcggattt ggatttcttt aacaactaag gttcctgttt ttaacatttt 60

aatgtccagt ttcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ttgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggttcgg gtttgggtta 420

actgctcta 429

<210> 2030
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g09b1

<400> 2030

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaatgc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat tt 522

<210> 2031
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g10b1

<400> 2031

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg 500

<210> 2032
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006g12b1

<400> 2032

tcggttttgc acaactcaag aaactacacc aacaaaccgg acatggctag aaagaataac 60

atggcgtcca agtctagcat ctccccccctc ctcttggcca ccgtcctggt ctccgtcttc 120

gccgccgtca cagccacagg tccatattgc tacgccggga tgggcctttc gatcaacccg 180

tttgaaggct gccgggagta tgtcgcacag caaacctgtg gcatcagcat atccgggtcg 240

gcggtgtcca ccgagccggg gaacacccca agggatcggt gctgcaagga gctttacgac 300

gcctcgcagc attgccggtg cgaggcagtg cgctacttca tagggcggag gtctgatccc 360

aattccagcg t 371

<210> 2033
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h01b1

<400> 2033

ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt taaagccaag 60

ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca aatcccaaaa 120

cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc tacctttttct 180

tatcattgaa tcaaccccctt tttttttttc ttttaaacac atcccaaccc aaagtataag 240

cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga gacactatct 300

ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt gaaagaaagt cta 393

<210> 2034
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h03b1

<400> 2034

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaag ccaagggctt ttgcccatct gcaatagctg acaagaactc tttctttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaa 403

<210> 2035
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h04b1

<400> 2035

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatc 367

<210> 2036
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h05b1

<400> 2036

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttatc 60

attagattgt caagggcttc tgcccatctg gaatagctga caagatctct ttggttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctaggcct atctagtccg aaaaatgcga actagaacta 300

catgagaca 309

<210> 2037
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h06b1

<400> 2037

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac g 501

<210> 2038
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h07b1

<400> 2038

acctagcaga tggtaagcca agaaagccaa ctgacggcat tgcacatgag ctgacattga 60

aatgctgctg ctgctattca acgagatcga ttttaacctc aaagcgccca gatcccaatg 120

acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg aatgcgaacc 180

ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg tcccattcga 240

ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt tgccgtgacc ctgcaacagg 300

tggccccttc gaagctgttc agccacagcc gcagcgggat tgagatcctc gtactcgacg 360

ttgctccccc tccgctagac acggtgttcg tcaacctgga gagcgaattg acaaaacgga 420

tggagagcgg cgagggcacc ttttacaag 449

<210> 2039
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h08b1

<400> 2039

cgactctctt cccgcaccta gcaaatggta agccaagaaa gccaactgac ggtattgcac 60

atgagctgac aattaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat ccgacaagcc 480

ccaatg 486

<210> 2040
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h09b1

<400> 2040

ccgcacctag caaatggtga gccaagaaag ccaactgacg gtattgcaca tgatctgaca 60

aagaaatgct gctggtgcta ttcaacgaga tcgattctaa cctcaaagcg cccagatccc 120

aatgacgagc tcgtcgacga tgtccaccac gttgcagatc gcgccatggg ccccgaatgc 180

gaaccccgtc gacatggact ggtccgatgt gccggtactg cgatccggcg acttgtccca 240

ttcgaccatc cagttctggc cctcctcgtg ggcgcttcag agctttgccg tgaccctgca 300

acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga tcctcgtcct 360

cgacgttgct acctttacgc tagacacggt gatcgacaac ctggagagcg aattgacaaa 420

acggttggag agcggcgagg gcacctttta caaggacc 458

<210> 2041
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h10b1

<400> 2041

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tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataatt 538

<210> 2042
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h11b1

<400> 2042

ctctaacgct caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaaa gccaagggct ttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagtttca aattgatgca 540

gacatgataa t 551

<210> 2043
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316006h12b1

<400> 2043

gttctccgac tctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gttgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccaagg 498

<210> 2044
<211> 574
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a03b1

<400> 2044

cttcccgcac ctagcaaatg gtcagccaag aaagccaact gacggcattg cacatgagca 60

gactaagaaa tgctgctgct gctattcagc gagagcgatt ctaacctcaa ggcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccttcga agctgttcag ccacagccgc agcgggattg agatcctcgt 360

cctcgacgtt gctcccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac cattcgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccgagga gcgcctagcc acggcgctca gggcagctct 540

cagcaccctc aagattgtcc attccggcga tttg 574

<210> 2045
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a04b1

<400> 2045

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgat 524

<210> 2046
<211> 576
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a05b1

<400> 2046

tgtggctgga tttcatcatt aaaacctcac tgcttgtttc ctgaaaccac aggtgttgaa 60

cagatgggga tactatccac tcattctaat aggatcatgg gcattcggca ctattaaccg 120

tatccatgat ttcatcgagc cagggcataa gatcttctgg ctctcagttc ttgacgttgg 180

gacagctgca ctaatggtag caaacctatc aaataaataa gttataaaat tcgccataga 240

tcatctttgc tcttcccgag tcgatgttct gaatgttgta ttttcagggc ttgttcaatt 300

caatagccta tggtttcaac agctcagtgc gtcgagcaat ccatgagaga ctggagctgt 360

aagtcaccac cgatctcttt ggtttgctat attattccca ataatcaatg aagcttgatt 420

tttatgaaac ccttggtctg ctagattctt gccagaacgg ctatatcgat ggcttccaag 480

caatttcaga ccaaaaaacc atctgattct acatcagcaa caacaacagc gaagcgaaat 540

ggtatcactc aagaccgagg accagcaatg acacta 576

<210> 2047
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a07b1

<400> 2047

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ctaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaat 479

<210> 2048
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a08b1

<400> 2048

ctctaacgct caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgtttttа acattttaat gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggtct tgggctaact gctctaataa ggagagtcag ctacttggat taaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgat 537

<210> 2049
<211> 533
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a09b1

<400> 2049

ccgacctctt cccgcaccta gcaaatggta agccaagaaa gccaactgac ggcattgcac 60

atgatcagac aaagaaatgc tgctgctgct attcaacgag atcgattcta acctcaaggc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccttccgc tagacgagcg gtgttcgtca accttggaga 420

gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa 480

gccccaatgc caaggacgtt gccaacatga cgcccgagga gcgtctagcc acg 533

<210> 2050
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007a11b1

<400> 2050

cggatttgga ttcctttaac aactaaggtt cctgttttta acattttaaa gccaagggct 60

tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tgtgtgcttc tttagcttac ttcacctaga gtcttctacc tttgcttatg 180

attgaatcaa cccgtgtttt ttttttcttt aaacacatcc gaacccacag tgtaagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taaggggaat aagacctcac aaacactcac 360

aagctatata gggcttgaaa gaaagcctag gtttgggttc ggggtaactg ctctaataag 420

gagagtcagc tacttggatt aaaaaga 447

<210> 2051
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b01b1

<400> 2051

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgatc 60

agacaaagaa atgctgctgc tgctattcaa ggagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaaca 307

<210> 2052
<211> 582
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b02b1

<400> 2052

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaatgcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataattaa 540

agattagatt caggttcaca ctgataggga atggtatcag at 582

<210> 2053
<211> 585
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b05b1

<400> 2053

tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taatgccaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag actttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttct tatcattgaa tcaaccccct ttttttttttc ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggcta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga tgcagacatg ataattaaag 540

attagattca ggttcaaact gatagggaat ggtatcagat catga 585

<210> 2054
<211> 267
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b06b1

<400> 2054

tcccgcacct agcaaatggt cagccaagaa agccagctga cggcattgca catgatcgga 60

caaagaaatg ctgctgctgc tattcagcga gatcgattct aacctcaaag cgcccagatc 120

ccaatgacga gctcgtggac gatgtccacc acgtagcaga cgcgccatgg gctcccgaat 180

gcgaaccccg acgacatggt ctggttcgtt gtgccggcac tgcgatccgg cgacttggcc 240

cattcgacca tccagttatc gccctcc 267

<210> 2055
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b07b1

<400> 2055

gctaacactt tgtacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctgtg ccgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

tctgacctca catacactca caagttatat agggctagaa agaaagtcta ggtttgggtt 420

agggttaact gctctgataa ggagagtcag ctacttggat taaagagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catg 514

<210> 2056
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b09b1

<400> 2056

gtgacaggag aacattttat ggcgactgac atcatgtggg atcctactgg aagatttctc 60

gcgactgcag ttacctcggt tcatgagatg gaaaatggtt tccaaatttg gtccttcaat 120

gggaagctaa tttacaagat ttcaaaggat cacttctatc agttccaatg gcgcccgagg 180

ccaccatcac tacttactcc tgagaaggag gaggacatct caaagaacct caagcggtac 240

agcaagaagt atgaacaaga ggatctggac gtgtccaacc aggtgggtga gctagagcgc 300

aagagacgga cgcagcttca agaggaatgg caaggatggg tggccaagtg gaagcagctg 360

cacgaggagg agcgtgcata ccggatggag ctgagaggcg gggaggagag cgacaaggaa 420

gaagaggcgg agtacaagga gattga 446

<210> 2057
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b10b1

<400> 2057

tgttacatct agcggatttg gatttcttta acaactaagg ttcctgtttt taacatttta 60

aagccaaggg cttttgccca tctccaatag ctgacaagaa ctctttcttt tctttacaaa 120

tcccaaaacc tttactagac ttttttctgct tctttagctt acttcaccta gagtcttcta 180

ccttttctta tcattgaatc aacccctttt tttttttctt ttaaacacat cccaacccaa 240

agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa ctacatgaga 300

cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc 360

acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt ttgggttaac 420

tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaa 473

<210> 2058
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b11b1

<400> 2058

tcgtttatat acatttggac ctgataaagt ggctggattt cttgagaagc atgatttaga 60

cctcatctgc cgagcccacc aggtcggtga ggatggcttc gagttctttg ctgatcgtca 120

gctagtaaca atattgtcgg cacctaatta ctgtggagaa ttcgataatg ctggtgccat 180

gatgagtgta gacgagacgc tgatgtgctc cttccaaata ctcaaacctg caaggaaaat 240

gttgcctggt tcaactaata acaagtctgg cttcaagtca atgagaggat ggtgacggtg 300

gcacggcgat tggtgagcaa gctgtggtct catttgcggg caggcacgtg cctaccacga 360

gcg 363

<210> 2059
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007b12b1

<400> 2059

tcttcccgta cctagcaaat ggtaagccaa gaaagccaac tgtcggcatt gca 53

<210> 2060
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c02b1

<400> 2060

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagcagaca aagaaatgct gctgctgcta ttcagcgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgttctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga g 441

<210> 2061
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c03b1

<400> 2061

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt ctggctctcg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgat 526

<210> 2062
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c04b1

<400> 2062

gttgttgcag gttgcaactg acaaatgcat catggggttt ctgtttttga tagtttgtgg 60

tgtgattgcc atcattgttg tcaagatcgt caacccgcat aacaagagca tcccagacat 120

cccgggactg gcgcctcctg cacctcctgc gcagaaccgg aagctgctat ccgtagatcc 180

tttcagaatg ctctgagcat tcgggaatgg aagtctcgtg ccatgcaggt ctctcgctct 240

gaagccaaaa cacacgatgt caactgttcc attggtgctt gcttgtacat tatacccgta 300

tgtaattttc tttgattggt tcattctttc cacactggct gctgttagct tcggattgtt 360

ag 362

<210> 2063
<211> 618
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c06b1

<400> 2063

ctctaacgct caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaat gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggata aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag 540

acatgataat taaagattag attcaggttc aaattgatag ggaatggtat cagatcatga 600

cagtgtggtc gagtagag 618

<210> 2064
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c07b1

<400> 2064

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggataa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga t 551

<210> 2065
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007c08b1

<400> 2065

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 2066
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007c10b1

<400> 2066

cggatttgga tttctttaac aactaaggtt cctgttttta acattttaat gccaagggct 60

tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac 360

aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg ctctaataag 420

gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaaat ccaagtattt 480

tac 483

<210> 2067
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d02b1

<400> 2067

cttattttga gcacttggcc atggcgttca gcggcgccca gatgctcgct gccttcacca 60

tgggctttct actcatggcc ttctgtgtgg aggctcgggt atgcatgtcc cctagcaagt 120

cgtacaaaag gagcccttgc aagaacgtgc gctgcaccgc ggcctgtcac aaagaacact 180

tcaagggtgg gtactgctcc agtaagaagt caattgttgg cgatgacctc aacgaagaca 240

acgaggagaa cttctataag aaacgtccta agaaaaagac gtgcatgtgt acatatgaat 300

gcagtaaagc cccgccacca ccgtcagaac ctgatgtgcc agagccaccg ggtgaacccg 360

tggtgccgga tcctcagaag aagccgccac cgccatatga acgtgacgtg ccggagccgc 420

ccttgggaga ac 432

<210> 2068
<211> 528
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d03b1

<400> 2068

tagaggcatt cgagcgatac tctgtcaaag cagaaaatat caccgttgtt agtgttcctg 60

gcagctttga aattcctgtt gcagcacaga agcttgggaa gtctggaaag tatgatgcaa 120

ttttgtgcat tggggctgtg attagaggtg acacaaccca ctatgatgct gttgcaaact 180

ctgctgcttc aggtgtactc aatgctggat tgtctgctgg cgtcccctgc gtatttggtg 240

ttctgacctg tgatgacatg gaccaggcgc taaatcgtgc tggtggcaag gctggaaaca 300

aaggtgctga gaccgccata actgctattg agatggcctc gctgtttcgg catcacttag 360

cctgatgaca ccgaatgcta tggtcggcga gccagcaaga ttttctcccc tgttcgcggc 420

tatcggagtt tttcccccac atttgtttta aaatttcttt tttattgctg caggctagtg 480

tttgacatgt cgtttctaaa ttattttggt ctgtacgtat gtactctg 528

<210> 2069
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d04b1

<400> 2069

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgtgctctgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttca 554

<210> 2070
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d05b1

<400> 2070

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagcagaca aagaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

ccttcgtctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caat 484

<210> 2071
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d07b1

<400> 2071

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttatagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttc 553

<210> 2072
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d10b1

<400> 2072

ggtggatttc atattaaaac ctcactgctt gtttcctgaa accacaggtg ttgaacttat 60

ggggatacta tccactcatt ctaataggag catgggcatt cggcactatg aaccgtatcc 120

atgatttcat cgagccaggg cataagatct tctggctctc agttcttgac gttgggacag 180

ctgcactaat ggtagcaaac ctatcaaata aataagttat aaaattcgcc atagatcatc 240

tttgctcttc ccgagtcgat gttctgaatg ttgtattttc agggcttgtt caattcaata 300

gcctatggtt tcaacagctc agggcgtcga gcaatccatg agagactgga gctgtaagtc 360

accaccgatc tctttggttt gctatattat tcccaataat caatgaagct tgatttttat 420

gaaaccctg gtctgctaga ttcttgccag aacggctata tcgatggctt ccaagcaatt 480

tcagaccaaa aaaccatctg attctacatg agcaacaaca ac 522

<210> 2073
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007d12b1

<400> 2073

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgagc tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agc 523

<210> 2074
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e04b1

<400> 2074

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agc 523

<210> 2075
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e05b1

<400> 2075

gctaacactt tgttcatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat aaaaagagtg atcaaaatga 480

ataagaaaac caagtatttt acggtatgca tgagttcaaa tttgatgcac acatgataat 540

taaagattag attc 554

<210> 2076
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e06b1

<400> 2076

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtctggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgat 535

<210> 2077
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e07b1

<400> 2077

tgttctccga cctcttcccg cacctagcgc atggtcagcc aagaaagcca actgacggca 60

ttgcatctat gagcagacaa agaaatgctg ctgctgctat tcaacgagat cgattctaac 120

ctcaaggcgc ccagatccca atgacgagct cgtcgacgat gtccaccacg ttgcagccgc 180

gccatgggcc ccgaatgcga accccgtcca catggcctgg tccgctgtgc cgccactgcg 240

atccggtgac ttgacccatt cgaccatgca gttctcgccc tcctcgccgg cgcttaacag 300

cttctccgtg accctgcaac aggtgggccc ttcgaagctg cccagccaca g 351

<210> 2078
<211> 568
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e08b1

<400> 2078

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga tcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccaaggac gttgccaaca tgacgcccga ggagcgtcta gccacggcgc 540

tcagggcagc tctcagcacc ctcaagat 568

<210> 2079
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e10b1

<400> 2079

ttacatctag cggatttgga tttctttaac aactaaggct cctgttgtta acattttaaa 60

gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc ttgacaaatc 120

ccaaaacctt tactagactt tttgtgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttctt tttttctttt aaacacatcc caacccaaag 240

tatcagcgcc cacctagtcc tatatagctc gaaaaatgcg aactagaact acatgagaca 300

ctatgtctgt cgttacgaac ctaacactct ataccaagct tactcggaat atgacctcac 360

aaacactcac acgctatcta gggctt 386

<210> 2080
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007e12b1

<400> 2080

tctccgacct cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg 60

cacatgagct gacaaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctcccttc cg 392

<210> 2081
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007f01b1

<400> 2081

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa gagtgatcaa aatgaataag 480

aaaatccaag tattttacgg tatccatgag ttcaaatttg atgcagacat gataattaaa 540

gattagattc 550

<210> 2082
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007f04b1

<400> 2082

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 2083
<211> 566
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007f07b1

<400> 2083

gctctaacgc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattc 566

<210> 2084
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007f08b1

<400> 2084

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tctttttctt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgata 536

<210> 2085
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007f10b1

<400> 2085

ttacatctag cggatttgga tttctttaac aactaaggct cctgttgtta acattttaaa 60

gccaagggct tttgcccatc tccaatagct gacaagaact ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttgtgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccatag 240

tataagcgcc cacctagccc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt ggttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagctatata gggcttgaaa gaaagcctag gtttgggttc gggttaactg 420

ctctaataag gagagt 436

<210> 2086
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007f12b1

<400> 2086

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacact 336

<210> 2087
<211> 585
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007g01b1

<400> 2087

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaatgcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggctt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgatcattaa 540

agattagatt caggttcaaa ttgataggga atggtatcag atcat 585

<210> 2088
<211> 578
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007g02b1

<400> 2088

actttgttca tctagcggat ttggatttct ttaacaacta aggttcctgt ttttaacatt 60

ttaatgccaa gggcttttgc ccatctccaa tagctaacaa gaactctttc ttttctttac 120

aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttte ttatcattga atcaacccct ttttttttt cttttaaaca catcccaacc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac 360

ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggtt 420

aactgctcta ataaggagag tcagctactt ggattaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttacggt atccatgagt tcaaatttga tgcagacatg ataattaaag 540

attagattca ggttcaaatt gatagggaat ggtatcag 578

<210> 2089
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007g04b1

<400> 2089

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tca 553

<210> 2090
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007g06b1

<400> 2090

actttgttca tctagcggat ttggatttct ttaacaacta aggttcctgt ttttaacatt 60

ttaaagccaa gggcttttgc ccatctccag atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtggtt acgaacctaa cactttgtac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa 400

<210> 2091
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007g08b1

<400> 2091

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg ag 512

<210> 2092
<211> 518
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h01b1

<400> 2092

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagcagaca aagaaatgct gctgctgcta ttcagcgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgatctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

atcgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caatgccaag gacgttgcca acatgacgcc cgaggagc 518

<210> 2093
<211> 577
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007h02b1

<400> 2093

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tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtctgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa gagtgatcaa aatgaataag 480

aaaatccaag tattttacgg tattcatgag ttcaaatttg atgcagacat gataattaaa 540

gattagattc aggttcaaat tgatagggaa tggtatc 577

<210> 2094
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316007h04b1

<400> 2094

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagcagaca aagaaatgct gctgctgcta ttcaaggaga tcgattctaa cctcaaggcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caatgccaag gacgttgcca acatgacgcc cgaggagcgt ctagccacgg cgctcagggc 540

agctctcagc accc 554

<210> 2095
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h05b1

<400> 2095

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatc tgatgcagac atgataatta 540

aagattagat tca 553

<210> 2096
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h06b1

<400> 2096

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaatgcca agggcttttg cccatctcca gatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttgta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatgcatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tc 552

<210> 2097
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h08b1

<400> 2097

cttgaagaga aaggttgatg ctggcgctga cggtatagtc actcagcttt tctatgatac 60

cgatatcttt ctcaagtttg tgaacgactg ccgtcaaatt ggtataacat gccctattgt 120

tcctggcata atgccaataa ataactacaa aggatttgtg cgcatgactg gattctgcaa 180

aactaagatt ccagctgaga ttactgctgc cttggatcct attaaagaca atgaggaggc 240

tgtgaaagca tatggaatcc accttggtac tgagatgtgc aagaaaattt tggctagtgg 300

gatcaagact ttgcaccttt acacactaaa catggaaaag actgctttag caattttgat 360

gaatcttgga ttaatagagg agtccaagct ttcaagaaca ttaccttgga ggcctccaac 420

taatgttttc cgtgtcaaag aagatgttcg ccctatattc tgggccaaca gaccaaagag 480

ttacatctca 490

<210> 2098
<211> 479
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h09b1

<400> 2098

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg ctcgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaat 479

<210> 2099
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h11b1

<400> 2099

atctagcgga tttggatttc tttaacaact aaggctcctg tttttaacat tgtaaagcca 60

agggcttttg cccatctcca atagctgaca agaactcttt cttttcttta caaatgccaa 120

aacctttact agactttgtg tgcttgttta gcttacttca cctagagggt tctacctttt 180

cttatgattg aatcaacccg ttttttttt tcttgtaaac acatcccaac ccataggata 240

agcgcccacc tagtcctatc tagtccgcag aatgcgaact agaactacat gagacactat 300

ctgtgtggtt acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac 360

actcacatgc tatatagggc ttgaaagaaa gtctaggttt gggttcgggt taactgctct 420

aa 422

<210> 2100
<211> 481

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316007h12b1

<400> 2100

tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt gcacatgagc 60

tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag 120

atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga 180

atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt 240

cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc 300

tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca agccccaatg 480

c 481

<210> 2101
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009a05b1

<400> 2101

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agt 403

<210> 2102
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009b01b1

<400> 2102

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agt 403

<210> 2103
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009b02b1

<400> 2103

actttgttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacac 307

<210> 2104
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009b06b1

<400> 2104

gtgttctccg acctcttccc gcacctagca aatggtaagc caagaaagcc aactgacggc 60

attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgac 515

<210> 2105
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009c01b1

<400> 2105

tcgttcctcg ggctcctcga ccgggtcctg ctcccgctct ggaggcgggt gaccggccac 60

acgccgacgc cgctgcagtg cgtgggcgcg ggccaggcgc tcaccgtgct gagcatggcc 120

gcgtcgtccc tcgtggagcg cgagcgcacc gccaccgtgc gcgcgcacgg tcaggagggc 180

gatccggcgt gggtgtcgcc gctgtcggcc atgtggctgg tgctgccgtt cgccgtggcc 240

ggggccgggg aggcgctgca ctttccggcg caggtgacgc tgtactacca ggagttcccg 300

ccgtcgctca agaacacggc cacgggcatg atggccatga tcgtcgcgct ggggttctac 360

ctgagca 367

<210> 2106
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009c02b1

<400> 2106

ctcttcccgc acctagcaaa tggtaagcca tgaaagccaa ctgacggcat tgcacttgag 60

cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc 300

ctgcaaca 308

<210> 2107
<211> 547
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009c06b1

<400> 2107

gctcaacact ttgttacatc tagcggattt ggatttcttt aacaactaag gttcctgttt 60

ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt tttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga 540

taattaa 547

<210> 2108
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009d03b1

<400> 2108

gtgttctccg acctcttccc gcacctagca aatggtaagc caagaaagcc aactgacggc 60

attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggcccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt tgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca cctttt 466

<210> 2109
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009d05b1

<400> 2109

agctcaacac tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt 60

tttaacattt taaagccaag ggcttttgcc catctccaat agctaacaag aactctttct 120

tttctttaca aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc 180

tagagtcttc tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac 240

atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag 300

aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg 360

gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg 420

gtttgggtta actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa 480

atgaataaga aaa 493

<210> 2110
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009d06b1

<400> 2110

gtgttctccg acctcttccc gcacctagca aatggtaagc caagaaagcc aactgacggc 60

attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggcccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggacc 475

<210> 2111
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009e01b1

<400> 2111

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggct tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tc 552

<210> 2112
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009e03b1

<400> 2112

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attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggacca 476

<210> 2113
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009f01b1

<400> 2113

ccgacctctt cccgcaccta gcaaatggta agccaagaaa gccaactgac ggcattgcac 60

atgagcttac aaagaaatgc tgctgctgct attcaacgag atcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc ggcattgaga 360

tcctcgtcct cgacgttgct ccccctttcgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat ccgacaagcc 480

ccaatg 486

<210> 2114
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009f04b1

<400> 2114

tcgcccacgc gttcggtcaa actgggtctg atgtcttgct ttgacaaggc tgctgtttct 60

ggactgcata accagtcaat cgtgaatgct gtcattgacg gcgatgacat catatacaga 120

gactatgtcg acgttagtgt agctgctggc acatccaagg gtcttgtggt gccggttatt 180

cgagatgctg acacaatgaa ctttgctgac atcgagaaag ggataaacaa ccttgccaag 240

aaggctactg agggggcgct gtcaattgac gagatggcgg gaggaacatt caccatctcc 300

aacggtggtg cctacggaag ccttattagc acgccca 337

<210> 2115
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009g01b1

<400> 2115

tgttctccgt cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacttga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccaaggac gttgccaaca tgacgcccga ggagcgtcta gccacg 536

<210> 2116
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009g05b1

<400> 2116

cctcttgccg cacctagcaa atggtaagcc aagaaagcca actgacggca ttgcacatga 60

gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac 300

cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca ttgagatcct 360

cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt 420

gacaaaacgg ctggagagcg gcgagggcac cttttacaag gac 463

<210> 2117
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h04b1

<400> 2117

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gccctaccta attgatgaat ttgtggagta cctaaccgag aatggatgcg ttcagcgtaa 120

caagtgaacc attcgaggct gcattctgac ttggatatca tgatttggtg gtacaaacat 180

gattcatgtc gatcaataga atatttatct ttggatgtcg gcattgttcc agctcccctt 240

cacaaagcag atgatgtcgt ttggcggaat ctacttgcgc aggggtgatt tcactggcta 300

ggattgcaaa ctatctatct ggtttgtatt ttgtgctgca cctatctgct acagcatacc 360

caaaatagtt attggtttac tgctgaatgg gcgatgggtc tata 404

<210> 2118
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h05b1

<400> 2118

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attgcacatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgac 515

<210> 2119
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010a08b1

<400> 2119

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tctccagtag gtaacatgaa ctctttcttt tctttacaaa tcccaaaacc tttactagac 120

tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttgggttaac tgctctaata aggagagtca 420

gctacttgga ttaaaagagt gatcaaaatg aata 454

<210> 2120
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010a10b1

<400> 2120

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actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct tttcttatca 180

ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt ataagcgccc 240

acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac tatctctgtc 300

gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca aacactcaca 360

agttatatag ggcttgaaag aaagtcta 388

<210> 2121
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010a11b1

<400> 2121

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aggttgttca tactcaagca aagatcatag cagatcaaga tgtgatgtat aagtatttat 120

caaagaactt aatttttgtt gctacggtgt ctcctaaagc tgctggtgaa attggatccg 180

cggcacctga agaagcttca ctagtggcat atctcattga tgctgtcagc ggacgcatac 240

tacaccgtgt gacccatcat ggtgcacaag gccctgtaca tgccgttgtc agcgagactg 300

gggttgtcta tcattatttc aacctccgag cccacagatt tgaaattgca gtgattg 357

<210> 2122
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010b01b1

<400> 2122

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tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttgggttaac tgctctaata aggagagtca 420

gctacttgga ttaaaagagt gatcaaaatg 450

<210> 2123
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010b02b1

<400> 2123

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gctgctattc aacgagatcg attctaacct caaagcgccc agatcccaat gacgagctcg 120

tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca 180

tggcctggtc cgttgtgccg gtactgcgat ccggcgactt gtcccattcg accatccagt 240

tctcgccctc ctcgtcggcg cttcagagct tcgccgtgac cctgcaacag gtggcccctt 300

cgaagctgtc cagccacagc cgcagcggca ttgagatcct cgtcctcgac gttgctcccc 360

ttccgctaga cacggtgttc gtcaacctgg agagcgaatt gacaaaac 408

<210> 2124
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010b03b1

<400> 2124

ggatttcttt acaactaagg ttcctgtttt taacattttt tgttcaaggg cttttgccca 60

tctccaatag ctaacaagaa ctctttcttt tctttacaaa tcccaaaacc tttactagac 120

tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttgggttaac tgctctaata aggagagtca 420

gctacttgga ttaaaaagag gtgatcaaaa tg 452

<210> 2125
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010b07b1

<400> 2125

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gctgctgctg ctattcaacg agatcgattc taacctcaaa gcgcccagat cccaatgacg 120

agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat gcgaaccccg 180

tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc cattcgacca 240

tccagttctc gccctcctcg tcggcgcttc agagcttcgc cgtgaccctg caacaggtgg 300

ccccttcgaa gctgtccagc cacagccgca gcggcattga gatcctcgtc ctcgacgttg 360

ctccccttcc gctagacacg gtgttcgtca acctggagag cgaattgaca aaacggctgg 420

agagcggtga gggcaccttt tacaaggac 449

<210> 2126
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010b08b1

<400> 2126

atttggattt ctttaacaac taaggttcct gtttttaaca ttttttttgcc aagggctttt 60

gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca aaacctttac 120

tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt tcttatcatt 180

gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa cccaaagtat aagcgcccac 240

ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta tctctgtcgt 300

tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa cactcacaag 360

ttatataggg cttgaaagaa agtctaggtt tgggttttgg gttaactgct ctaataagga 420

gagtcagcta cttggataaa aagagtgatc aaaatgaata agaaaatcca agtattttac 480

ggtatccatg agttcaaatt tgatgcagac atga 514

<210> 2127
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010b11b1

<400> 2127

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acgatatcga ttctaacctc aatgcgccca gatcccaatg acgagctcgt tgacgatttt 120

caccacgttg cagtcgcgcc atgggccccg aatgctaacc ccgtcgacat ggcctggtcc 180

gttgtgccgg tactgcgatc cggcgacttg tcccattcga ccatccagtt ctcgccctcc 240

tcgtcggcgc ttcagagctt cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc 300

agccacagcc gcagcggcat tgagatcctc gttctcgacg ttgctccccc tccgctagac 360

acggtgttcg tcaacctgga gagcgaattg acaa 394

<210> 2128
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010c01b1

<400> 2128

ttaattctca agaggcggca ccatgctcgt gtaccaggac aagctttccg gcgacgagct 60

tctgtcggat tcgttcccgt acagggagct ggagaacggc gtgctctggg aagtcgacgg 120

ccattgggtc gttcaaggag cagttgatgt ggacattgga gccaatccct ctgctgaggg 180

tggtggtgat gatgagggtg tcgatgacca ggccgagaag gtggttgaca ttgttgacac 240

cttccgtctt caggagcaac ctgcttttga caagaagcag tttatctctc acatgaagcg 300

ctacatcaag aacctctctg ccaagcttga aggggatgac c 341

<210> 2129
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010c05b1

<400> 2129

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ccacgttgca gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt 180

tgtgccggta ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc 240

gtcggcgctt cagagcttcg ccgtgaccct gcaacaggtg gccccttcga agctgtccag 300

ccacagccgc agcggcattg agatcctcgt actcgacgtt gctcccctt 349

<210> 2130
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010c11b1

<400> 2130

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aacgtgatcg attctaacct cattgcgccc agatcccaat gacgagctcg tcgacgatgg 120

ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca tggcctggtc 180

cgttgtgccg gtactgcgat ccggcgactt gtcccattcg accatccagt tctcgccctc 240

ctcgtcggcg cttcagagct tcgtcgtgac cctgcaacag gtggtccctt cgaagctgtc 300

cagccacagc cgcagtggca ttgagatcct cgttctcgac gttgctaccc ttccgctaga 360

cacggtgttc gtcaacctgg agagcgaatt gacaaaacgg ctggagagcg gtgagggcac 420

ctt 423

<210> 2131
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010c12b1

<400> 2131

aagaaagcca actgacggca ttgcacatga gcagacaaag aaatgctgct gctgctatgg 60

aacgtgatcg attctaacct caaagcgccc agatcccaat gacgagctcg tcgacgatgt 120

ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca tggcctggtc 180

cgttgtgccg gtactgcgat ccggcgactt gtcccattcg accatccagt tctcgccctc 240

ctcgtcggcg cttcagagct tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc 300

cagccacagc cgcagcggca ttgagatcct cgttctcgac gttgctcccc ttccgctaga 360

cacggtgttc gtcaacctgg agagcgaatt gacaaaacgg ttggagagcg gcgagggcac 420

cttttttac 428

<210> 2132
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010d01b1

<400> 2132

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gatctattct aacctcaaag cgcccagatc ccaatgacga gctcgtcgac tatgtccacc 120

acgttgcagt cgcgccatgg gccccgaatg cgaaccccgt tgacatggcc tggttcgttg 180

tgccggtact gcgatccggc gacttgtccc attcgaccat ccagttctcg ccctcctcgt 240

cggcgcttca gagcttcgcc gtgaccctgc aacaggtgg 279

<210> 2133
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010d03b1

<400> 2133

aaagccaact gacggcattg cacatgtgct tacaaagaaa tgctgctgct gctattcaac 60

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ccacgttgca gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt 180

tgtgccggta ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc 240

gtcggcgctt cagagcttcg ccgtgaccct gcaacaggtg gcccccttcga agctgttcag 300

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ggtgttcgtc aacctggaga gcgaattgac aaaa 394

<210> 2134
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010d08b1

<400> 2134

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gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca aaacctttac 120

tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt tcttatcatt 180

gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat aagcgcccac 240

ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta tctctgtcgt 300

tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa cactcacaag 360

ttatataggg cttgaaagaa agtctaggtt tgggtatggg ttaactgctc taataa 416

<210> 2135
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010d10b1

<400> 2135

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actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct tttcttatca 180

ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt ataagcgccc 240

acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac tatctctgtc 300

gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca aacactcaca 360

agttatatag ggcttgaaag aaagtctagg tttgggtttg ggttaactgc tctaataagg 420

agagtcagct acttggatta aaagagtgat caaaatgaat aagaaaatcc aagtatttta 480

cggtatccat gagttcaaat ttgatgcaga catgataatt aaagattaga ttca 534

<210> 2136
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010d12b1

<400> 2136

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atgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag atcccaatga 120

cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga atgcgaaccc 180

cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt cccattcgac 240

catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc tgcaacaggt 300

ggcccccttcg aagctgtcca gccacagccg cagcggcatt gagat 345

<210> 2137
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010e03b1

<400> 2137

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ccatctccaa tagctaacaa gaactctttc ttttctttac aaatcccaaa acctttacta 120

gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc ttatcattga 180

atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa gcgcccacct 240

agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc tctgtcgtta 300

cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca ctcacaagtt 360

atatagggct tgaaagaaag tctaggtttg ggtttgggtt aact 404

<210> 2138
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010e08b1

<400> 2138

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acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc 180

ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggt 409

<210> 2139
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010e09b1

<400> 2139

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acgagatcga ttctaacctc aaagcgccca gatcccaatg acgagctcgt cgacgatgtt 120

caccacgttg cagtcgcgcc atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc 180

gttgtgccgg tactgcgatc cggcgacttg tcccattcga ccatccagtt ctcgccctcc 240

tcgtcggcgc ttcagagctt tgccgtgacc ctgcaacagg tggccccttc gaagctgtcc 300

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acggtgttcg tcaacctgga gagcgaat 388

<210> 2140
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010e10b1

<400> 2140

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acgagatcga ttctaacctc atagcgccca gatcccaatg acgagctcgt cgacgatgtt 120

caccacgttg cagtcgcgcc atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc 180

gttgtgccgg tactgcgatc cggcgacttg tcccattcga ccatccagtt ctcgccctcc 240

tcgtcggcgc ttcagagctt cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc 300

agccacagcc gcagcggcat tgagatcctc gtcctcgacg ttgctcccct tccgctagac 360

acggtgttcg tcaacctgga gagcgaattg 390

<210> 2141
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010e11b1

<400> 2141

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atctccaata gctaacatga actctttctt ttctttacaa atcccaaaac ctttactaga 120

ctttttctgc ttctttagct tacttcacct agagtcttct acctttttctt atcattgaat 180

caaccccttt ttttttttct tttaaacaca tcccaaccca aagtataagc gcccacctag 240

tcctatctag tccgaaaaat gcgaactaga actacatgag acactatctc tgtcgttacg 300

aacctaacac tttctaccaa gcttaatcgg aataagacct cacaaacact cacaagttat 360

atagggcttg aaagaaagtc taggtttggg tttgggttaa ctgctctaaa aggagagtca 420

gctacttgga ttaaaagagt gatcaaaatg aataagaaaa tccaagtatt ttacggtatt 480

catgagttca aatttgatgc agacatgata attaaagatt agattcaggt tcaaattgat 540

agggaatggt atcagatcat gac 563

<210> 2142
<211> 213
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f02b1

<400> 2142

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gccatgggcc ccgaatgcga accccgtcga catggcctgg tccgttgtgc cggtactgcg 180

atccggcgac ttgtcccatt cgaccatcca gtt 213

<210> 2143
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f04b1

<400> 2143

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cgagatcgat tctaacctca aagcgcccag atcccaatga cgagctcgtc gacgatgtcc 120

accacgttgc agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg 180

ttgtgccggt actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct 240

cgtcggcgct tcagagcttc gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca 300

gccacagccg cagcggcatt gagatcctcg tcctcgacgt tgctcccctt ccgctagaca 360

cggtgttcgt caacctggag agcgaattga caaaacggct ggagagcggc gagggcacct 420

tttacaagga cc 432

<210> 2144
<211> 248
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f05b1

<400> 2144

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caatgacgag ctcgtcgacg atgaacacca cgttgcagac gcgccatggg ccccgaatgc 120

gaaccctgtc gacatggtct ggtccgttgt gccggtactg cgatccggcg acttgtccca 180

ttcgaccatt cagttctcgc cctactcgtc ggcgcttcag agcttcgccg tgaccctgca 240

acaggtgg 248

<210> 2145
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f06b1

<400> 2145

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gatcccggcg agcgagatgg ccaacccgag ggtgttcttc gacatgaccg tcggcggcgc 120

gccggcgggg cgcatcgtga tggagctgta caaggacgcg gtgccgcgga cggtggagaa 180

cttccgcgcg ctctgcaccg gcgagaaggg cgtcggcaag agcggcaagc cgctgcacta 240

caagggcagc gccttccacc gcgtgatccc cgacttcatg tgccagggcg gcgacttcac 300

caggggcaac ggcaccggag gcgagtacat ctacggcgag aagttcgccg acgagaagtt 360

cgtccacaag cacaccaa 378

<210> 2146
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f07b1

<400> 2146

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gttctcctac cggtaatcag ctgctccagt gccaccgcat atatactccg atgagtatcc 180

ttgatatctt ccctccacat tgcatctaat gacacactaa cacattgcat ctgatgacac 240

acttccaact ggaatatatc aattacatac cacggtgaaa tttgaaactt cccttgagag 300

atgctaaagt actatttatt tgaccggctt ggtgtacatt gaccttta 348

<210> 2147
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f08b1

<400> 2147

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acgccaccat gggtatctcg cgtgactcca tgcacaagcg ccgggccacc ggtgggaagc 120

agaaggcttg gaggaagaag cgaaagtatg agctcggccg ccagccagcc aacactaagc 180

tttcaagcaa caagacagtg aggagggtcc gtgttcgcgg aggtaacgtg aagtggaggg 240

ctctccgtct tgacactggt aacttctcat ggggta 276

<210> 2148
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f10b1

<400> 2148

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ataggatcat gggcattcgg cactattaac cgtatccatg atttcatcga gccagggcat 120

aagatactta tggctctcag ttcttgacga tgggacagct gcacttatgg gagcaaacct 180

atcaaataaa taagttataa aattcgccat agatcatctt tgctcttccc gagacgatgt 240

tctgaatgtt gtattttcag ggcttggtca attcaatagc ctatggtttc aacagctcaa 300

tgcgtcgagc aatccatgag agac 324

<210> 2149
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010f11b1

<400> 2149

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tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttctttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac 360

aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg ctctaatagg 420

agagtcagct acttggatta aaagagtgat caaaatgaat aagaaaatcc aagtatttta 480

cggtatccat gagttcaaat ttgatgcaga catgat 516

<210> 2150
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010g03b1

<400> 2150

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tctccaatag ctaacaagaa ctctttcttt tctttacaaa tcccaaaacc tttactagac 120

tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttggg 395

<210> 2151
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010g04b1

<400> 2151

acaactaagg ttcctgtttt taacattttt atttcaaggg cttttgccca tctccaatag 60

ctaacaagaa ctctttcttt tctttacaaa tcccaaaacc tttactagac tttttctgct 120

tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc aacccctttt 180

ttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt cctatctagt 240

ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga acctaacact 300

ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata tagggcttga 360

aagaaagtct aggtttgggt ttgggttaac tgctctaaaa ggagagtcag ctacttggat 420

taaaagagtg atcaaatgaa 440

<210> 2152
<211> 391
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316010g06b1

<400> 2152

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ccaatagctg acaagaactc tttcttttct ttacaaatcc caaaaccttt actagacttt 120

ttctgcttct ttagcttact tcacctagag tcttctacct tttcttatca ttgaatcaac 180

ccctttttt ttttctttta aacacatccc aacccaaagt ataagcgccc acctagtcct 240

atctagtccg aaaaatgcga actagaacta catgagacac tatctctgtc gttacgaacc 300

taacactttc taccaagctt aatcggaata agacctcaca aacactcaca ngttatatag 360

ggcttgaaag aaagtctagg tatgggtttg g 391

<210> 2153
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010g10b1

<400> 2153

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tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac 360

aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg ctctaataag 420

gagagtcagc tacttggatt aaaagagtga tcaaaatgaa taagaaaa 468

<210> 2154
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010g11b1

<400> 2154

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acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg aatgcgaacc 180

ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg tcccattcga 240

ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc ctgcaacagg 300

tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc gtactcgacg 360

ttgctccccc tccgctagac acggtgttcg tcaacctgga gagcgaattg acaaaacggc 420

tggagagcgg cgagggcacc tttta 445

<210> 2155
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010h01b1

<400> 2155

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gagatcgatt ctaacctcaa agcgcccaga tcccaatgac gagctcgtcg acgatgtcca 120

ccacgttgca gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt 180

tgtgccggta ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc 240

gtcggcgctt cagagcttcg ccgtgaccct gcaacaggtg gcccttcga agctgtccag 300

ccaca 305

<210> 2156
<211> 243
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010h02b1

<400> 2156

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aagcgcccac ctagtcctat ctagttcgaa caatgcgaac tagaacgaca tgagacacta 180

tctttgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag accttacaaa 240

cac 243

<210> 2157
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010h05b1

<400> 2157

ggatttcttt acaactaagg ttcctgtttt aacatttttt gttcaagggc ttttgcccat 60

ctccaatagc tgacaagaac tctttctttt ctttacaaat cccaaaacct ttactagact 120

ttttctgctt ctttagctta cttcacctag agtcttctac cttttcttat cattgaatca 180

acccctttt ttttttcttt taaacacatc ccaacccaaa gtataagcgc ccacctagtc 240

ctatctagtc cgaaaaatgc gaactagaac tacatgagac actatctctg tcgttacgaa 300

cctaacactt tctaccaagc ttaatcggaa taagacctca caaacactca caagttatat 360

agggcttgaa agaaagtcta ggtttgg 387

<210> 2158
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316010h06b1

<400> 2158

tggatttctt tacaactaag gttcctgttt ttaacatttt tagttcaagg gcttttgccc 60

atctccaata gctaacaaga actctttctt ttctttacaa atcccaaaac ctttactaga 120

ctttttctgc ttctttagct tacttcacct agagtcttct acctttttctt atcattgaat 180

caaccccttt ttttttttct tttaaacaca tcccaaccca aagtataagc gcccacctag 240

tcctatctag tccgaaaaat gcgaactaga actacatgag acactatctc tgtcgttacg 300

aacctaacac tttctaccaa gcttaatcgg aataagacct cacaaacact cacaagttat 360

atagggcttg aaagaaagtc t 381

<210> 2159
<211> 386
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316010h10b1

<400> 2159

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gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca aaacctttac 120

tagacttttt ctgcttctnt agcttacttc acctagagtc ttctaccttt tcttatcatt 180

gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa cccaaagtat aagcgcccac 240

ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta tctctgtcgt 300

tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa cactcacaag 360

ttatataggg cttgaaagaa agtcta 386

<210> 2160
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316010h12b1

<400> 2160

tggtaagcca agaaagccaa ctgacggcat tgcacttgtt gtcagacaaa gaaatgctgc 60

tgctgctatt gaacgagatc gattctaacc tcaaagcgcc cagatcccaa tgacgagctc 120

gtcgacgatg tccaccacgt tgcagtcgcg ccatgggccc cgaatgcgaa ccccgtcgac 180

atggcctggt ccgttgtgcc ggtactgcga tccggcgact tgtcccattc gaccatccag 240

ttctcgccct cctcgtcggc gcttcagagc ttcgccgtga ccctgcaaca ggtggccccct 300

tcgaagctgt ccagccacag ccgcagcggc attgagatcc tcgtctccga cgttgctccc 360

cttccgc 367

<210> 2161
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a07b1

<400> 2161

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acattttaaa tttcaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacct 266

<210> 2162
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a08b1

<400> 2162

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaa 405

<210> 2163
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a10b1

<400> 2163

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tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaggcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg acca 474

<210> 2164
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a11b1

<400> 2164

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ctcttgctct cgcagaagga gaagtggatg gacaaggtgt atatagagaa ttcatactac 180

ttgcacggtt tctgggctgg gctggtggac aagtacgagg agatgatgga gaaccaccat 240

ccagggcttg gggatgagcg gtggccattt gtgacacact ttgttgggtg caagccatgc 300

ggaagctatg gtgattaccc agtagaccgg tgtctcaaga gtatggagcg agcatttaat 360

tttgccgat 369

<210> 2165
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a12b1

<400> 2165

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tac 503

<210> 2166
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018b07b1

<400> 2166

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tagactattt ctgcttcttt agcttacttc tcccactgcc ttctaccttt tcttatcatt 120

gaaacaaccc ctttttttt ttcttttaa cacatcccaa cccaaagtat aagcgcccac 180

ctagtcctat ctagtccgaa aaatgcgaac taaaactaca tgagacacta tctctgtcgt 240

tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa cactcacaag 300

t 301

<210> 2167
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018b08b1

<400> 2167

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tgcacatgag ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg ac 472

<210> 2168
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018c07b1

<400> 2168

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acatgagctg acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggcccctaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgactt 246

<210> 2169
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018c08b1

<400> 2169

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

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aataagaaaa tccaagtatt ttacggtatc catgagttca aatttg 526

<210> 2170
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018d12b1

<400> 2170

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acatgagttt caaagaaatg ctgctgctgc tattcaacga gatcgattct aacctcaaag 120

cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt cgcgccatgg 180

gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact gcgatccggc 240

gacttgtccc attcgaccat ccagttctcg ccctcctcgt cggcgcttca gagcttcgcc 300

gtgaccctgc aacaggtggc cccttcgaag ctgtccagcc acagccgcag cggcattgag 360

atcctcgtcc tcgacgttgc tccccttccg ctagacacgg tgttcgtcaa cctggagagc 420

gaattgacaa aacggctgga gagcggcgag ggcacctttt acaaggac 468

<210> 2171
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e07b1

<400> 2171

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtct 405

<210> 2172
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e08b1

<400> 2172

ctccgacctc ttcccgcacc tagcaaatgg taagccaaga aagccaactg acggcattgc 60

acatgagcag tcaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagc 295

<210> 2173
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e09b1

<400> 2173

ggatttggat ttctttaaca actaaggttc ctgcttttaa cattgtaaag cctagggctt 60

ttgcccatct ccaatagcta acaagaactc tttcttttct ttacaaatcc caaaaccttt 120

actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct tttcttatca 180

ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaatgt ataagcgccc 240

acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac tatctctgtc 300

gttacgaacc taacactttc taccaagctt aatcggaata tgacctcaca aacactcaca 360

agttatatag ggcttgaaag aaa 383

<210> 2174
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e11b1

<400> 2174

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag a 441

<210> 2175
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e12b1

<400> 2175

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctaaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga c 471

<210> 2176
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018f11b1

<400> 2176

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg ac 472

<210> 2177
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018f12b1

<400> 2177

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acgggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gac 473

<210> 2178
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018g07b1

<400> 2178

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgtt cttacaaaga aatgctgctg ctggtattca ac 102

<210> 2179
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018g09b1

<400> 2179

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac g 501

<210> 2180
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h08b1

<400> 2180

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacc 246

<210> 2181
<211> 169
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h10b1

<400> 2181

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgtg ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgtt 169

<210> 2182
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h12b1

<400> 2182

tggcagtttt acacgtacat gattcttatt tcagaaacaa ccacccctga aatcaacatg 60

agatggttcc ttgacaccgc tggactgaag aagtcgagcg cctacctgat caatggtatt 120

ttgatatttg ttgtatggct ggcggcaagg atatttttgt tcctgtatgt attttaccac 180

atctatttgc actacagcca gataatgaag atgcacgcat ttggttatta cctgacactg 240

accgtgccgt cggtgctctt tgtcatgaac gcaatgtggt ttacgaagat tttgaaaggg 300

gtaatgaaaa cactgtcgaa atggtcgtaa atcggattag gctctgcgga ccagaagtac 360

aacgtaactg ggtgttcctg ccgtgctgca ctgcgtgtga cctgaatgtg taaagttatg 420

aatatatgaa tta 433

<210> 2183
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019a08b1

<400> 2183

acctagcaaa tggcaatgcc aagaaagcca ctgacggata tacatgagct gttaagaaac 60

gctgctgctg ctatacatcg agatcgattc taacctcaaa gcgcccagat cccaatgacg 120

agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat gcgaaccccg 180

tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc cattcgacca 240

tccagttctc gccctcctcg gcggcgcttc agagcttcgc cgagaccctg caacaggtgg 300

ccccttcgaa gctgtccagc cacagccgca gcggcattga gatcctcgtc ctcgacgttg 360

ctccccttcc gctagacacg gtgttcgtca acctggagag cgaattgaca aaacggctgg 420

agagcggcga gggcaccttt ta 442

<210> 2184
<211> 302

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019a11b1

<400> 2184

aactctttct tttctttgca aatcccaaaa cctttactag acttttttctg cttctttagc 60

ttacttcacc tagagtcttc tacctttttct tatcattgag tcaaccccctt ttttttttttc 120

ttttaaaacac atcccaaccc aaagtgtaag cgcccaccta gtcctatcta gtccgaaaaa 180

tgcgaactag aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca 240

agcttaatcg gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaagt 300

ct 302

<210> 2185
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019b09b1

<400> 2185

actttcttac atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat 60

tttaaatttc agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataattaa 540

aga 543

<210> 2186
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019b10b1

<400> 2186

tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa cattttaatt 60

ttcagggctt tttcccatct ccaatagcta acaagaactc tttcttttct ttacaaatcc 120

caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct 180

tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac 300

tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca 360

aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg ggttaactgc 420

tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa taagaaaatc 480

caagtatttt a 491

<210> 2187
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019b11b1

<400> 2187

cagtgcccca gcttttgccg ccaccgccgc cgtccctgcc cctctccgcc tgctgccacc 60

gtcacagaca ccgccgtcta cttcagctgc tgccgacccc gagacggaga ggctcaagga 120

ggcagccgct cgacgcaagg cggagggcgc gacggcgtcg gcggtgtacg cccgccagcg 180

cgacgagtac tggaccccgc agcggaacct tccgtacacg gccatctttc cgtagccgga 240

ggcccagagc gccgcgccgc cgcggagacg ggtgcgaaga gcgtacggtg gcgagaggcc 300

gaccgagagg agggcgagga tcgacctgac ggtgccgatg ctgatg 346

<210> 2188
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019b12b1

<400> 2188

atctagcgca tttggatttc tttaacaact aaggttcctg tttttaacat tgtaaatttc 60

agggctattt cccatctcca atagctaaca agaactcttt cttttcttta caaatcccaa 120

aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct tctacctttt 180

cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac ccaaagtata 240

agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat 300

ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac 360

actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt taactgctct 420

aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa gaaaatccaa 480

gtattttacg gtatccatg 499

<210> 2189
<211> 488
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019c09b1

<400> 2189

atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacat tttaaattta 60

gggcnatagt ccatctccaa tagctaacaa gaactctttc ttttctttac aaatcccaaa 120

acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc 180

ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggtt aactgctcta 420

ataaggagag tcagctactt ggattaaaaa gagtgatcaa aatgaataag aaaatccaag 480

tattttac 488

<210> 2190
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019c11b1

<400> 2190

catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca ttttaaattc 60

aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca 120

aaaccttttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataaggag agtcagctac ttggattaaa aagagtgatc aaaatg 466

<210> 2191
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019d07b1

<400> 2191

ttcccgcacc tagcaaatgg tatgccaaga aagccaactg acggcattgc acatgagctt 60

acaagatatg ttgctgctgc tattcaacga gatcgattct aaccttaaag cgcccagatc 120

ccaatgacga gctcgtcgac gatgtccacc acgttgcagt cgcgccatgg gccccgaatg 180

cgaaccccgt cgacatggcc tggtccgttg tgccggtact gcgatccggc gacttgtccc 240

attcgaccat ccagttctcg ccctcctcgt cggcgcttca gagcttcgcc gtgaccctgc 300

aacaggtggc cccttcgaag ctgtccagcc acagccgcag cggcattgag atcctcgtcc 360

tcgacgttgc tccccttccg ctagacacgg tgttcgtcaa cctggagagc gaattgacaa 420

aactgctgga gagcggcgag ggcacctttt acaaggacca tccgacatgc cccaatgcca 480

aggacgttgc caacatgacg cccgaggagc gtcta 515

<210> 2192
<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019d10b1

<400> 2192

actcattcta ataggagcat gggtattcgg cactattgac cgtatccatg attgcatcga 60

gccagggcat acgatcttct ggctctcagt tcttgacggt gggacagctg cactaatggt 120

agccaaccta tc 132

<210> 2193
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019d12b1

<400> 2193

tttggatttc tttaacaact aaggttcctg tttttaacat tttaaagtca agggcttttg 60

cccatctcca atagctaaca agaactcttt cttttcttta caaatcccaa aacctttact 120

agacttttte tgcttcttta gcttacttca cctagagtct tctacctttt cttatcattg 180

aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata agcgcccacc 240

tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat ctctgtcgtt 300

acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac actcacaagt 360

tatatagggc ttgaaagaaa gtctaggttt gggtttgggt taactgctct aataaggaga 420

gtcagctact tggattaaaa agagtgatca aaatgaataa gaaaatccaa gtattttacg 480

gtatccatga g 491

<210> 2194
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019e07b1

<400> 2194

aaccttaaag cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt 60

cgcgccatgg gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact 120

gcgatccggc gacttgtccc attcgaccat ccagttctcg ccctcctcgt aggcgcttca 180

gagcttcgcc gtgaccctgc aacaggtggc ccctaagaag ctgttcagcc acagccgtag 240

cggcattgag atcc 254

<210> 2195
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019f08b1

<400> 2195

ttcccgcacc tagcaaatgg taatgccaag aaagccaact gacggcattt ttcatgagca 60

tataaagaaa tgctgctgct gctattcaac gagatcgatt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgttg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagctttg ccgtgaccct 300

gcaacaggtg gccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

ccttgacgtt gctcccctta cgctagacac 390

<210> 2196
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019f12b1

<400> 2196

aaatcccaaa acctttacta gactttgtct gcttctttag cttacttcac ctagagtctt 60

ctacctgttc ttatgatgga gtcaacccct ttttttttt cttgtaaaca catcccaacc 120

caaagtgtaa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 180

agacactatc tctgtcgtta cgaacctaac actttctacc aggcttaatc ggaataagac 240

ctcacaaaca ctcacaagtt atatagggct tgaaaga 277

<210> 2197
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019g07b1

<400> 2197

cccatctgca atagctaaca agaactcttt cttttcttta caaatcccaa aacctttact 60

agactttgtc tgcttcttta gcttacttca cctagagtct tgtacctttt cttatcattg 120

aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata agcgcccacc 180

tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat ctctgtcgtt 240

acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac actcacaagt 300

tatatagggc ttgaaagaaa gactaggttt gggtttgggt taactgctct aataaggaga 360

gtcagctact tggattaaaa agagtgatca aaatgaataa gaaa 404

<210> 2198
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020a03b1

<400> 2198

cactttgtta catctagcgg atttggattt ctttaacaac taaggctcct gggtttatta 60

tttgaatttt cagggctttt gcccatctgc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aa 462

<210> 2199
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020a04b1

<400> 2199

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaattt tagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttata 385

<210> 2200
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020c02b1

<400> 2200

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ccatctgcga tagctaacaa gaactctttc ttttctttac aaatcccaaa acctttacta 120

gactttgtct gcttctttag cttacttcac ctagagtctt gtacctgttc ttatcattga 180

gtcaacccct tttttgtttt cttttaagca catcccaacc cagagtatag agcgcccacc 240

tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat ctctgtcgtt 300

acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac actcacaagt 360

tatatagggc ttgaaagaaa gtctaggttt gggtttgggt taactgctct aataaggaga 420

gtcagctact tggattaaaa agagtgatca aaatg 455

<210> 2201
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020c03b1

<400> 2201

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aagggctatg ttccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca 120

aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata agaaaatcca 480

agtattttac ggtatccatg agttcaaatt tgat 514

<210> 2202
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020d01b1

<400> 2202

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agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt 120

actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct 180

atagagcttt gccgtgaccc tgcaacaggt ggcccttcg aagctgtcca gccacagccg 240

cagcggcatt gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt 300

caacctggag agcgaattga caaaactgct ggagagcggc gagggcacct tttacaagga 360

c 361

<210> 2203
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020e01b1

<400> 2203

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acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc 180

ttatcattga atcaacccct ttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggtt aactgctcta 420

ataaggagag tcagctactt ggattaaaaa gagtgatcaa aatgaataag aaaatccaag 480

tatttta 487

<210> 2204
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020f02b1

<400> 2204

cccatctcca atagctaaca agaactcttt cttttcttta caaattccaa aacctttact 60

agacttttc tgcttcttta gcttacttca cctagagtct tctacctttt cttatcattg 120

aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata agcgcccacc 180

tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat ctctgtcgtt 240

acgaacctaa cactttctac caggcttaat cggaataaga cctcacaaac actcacaagt 300

tatatagggc ttgaaagaaa gtctaggttt gggtttgggt taactgctct aataaggaga 360

<210> 2205
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020g01b1

<400> 2205

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tgggctttag cccatctcca atagctaaca agaactcttt cttttcttta caaatcccaa 120

aacctttact agacttttc tgcttcttta gcttacttca cctagagtct tctacctttt 180

cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac ccaaagtata 240

agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat gagacactat 300

ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga cctcacaaac 360

actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt taactgctct 420

aataaggaga gtcagctac 439

<210> 2206
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021a02b1

<400> 2206

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tgcagtcgcg ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc 120

ggtactgcga tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc 180

gcttcagagc ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt gcagccacag 240

ccgcagcggc attgagatcc tcgtactcga cgttgctccc cttgcgctag acacggtgtt 300

cgtcaacctg gagagcgaat tgacaa 326

<210> 2207
<211> 379
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021a05b1

<400> 2207

ggatttggat ttctttaaca actaaggttc ccgccccttt cttgccttcn cagggcgnan 60

gcccatctcc aatagctgac aagaactctg tcttttctct acaaatccca aaacctttac 120

tagacttttt ctgcttcttt agcttacttc acctagagtc ttgtaccttt tcttatcatt 180

gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa cccaatgtat aagcgcccac 240

ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta tctctgtcgt 300

tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa cactcacaag 360

ttatataggg cttgaaaga 379

<210> 2208
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021a06b1

<400> 2208

cactttgttc atctagcgga tttggatttc tttaacaact aaggttcctg cccgttttta 60

ttgaatgctc aagggcgatt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ctaactgctc taataaggag agtcagctac ttggattaaa aaga 464

<210> 2209
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021a08b1

<400> 2209

cacagcgcga aggcattaac gcctatgacg tgtactcccc aaaaatatgc tcgcaggttt 60

acttccaccc acaccatatg agcaccgcaa aaatggtgga ccacggcata tcctcacagc 120

tactactatc acacaggtta tcatagagcc attcaaacag agatgtcgaa aagaacccct 180

gctgcctcct tggcggcaca aatctgaccc aaatgcccaa ttgagctgga cagtctctaa 240

gcacgtgaag cacagattca actccacctt tacaaacctg agacacattc gaggcgctaa 300

gatgtcttgg atgccgatcc tcatctgtca taactatgcc cagcttggtt atatacattt 360

tctggctata cttatactta tatatatctg tcctaaatat aactattac 409

<210> 2210
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021b01b1

<400> 2210

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ctgaggtggc agtactagtg gaggtgctcc ccatttctgg ggtgcctgtt ggatcttcag 120

tcgccggggt gtctgttctc ccagctgaac tcgtctcggc taaaccccgt ctttgtgtca 180

aggctttggt gtctgataca aaaacaaaga acaagtgatg cgccaattcg gctgcaacca 240

gtcagagcac ctgtaacggc aatatatgga ggaaacgatc ttgttgggca tgctcatgtc 300

agccatgccg cagcttgagc attccacaaa caaagaaacg gcatcgcagc tgtcttgcct 360

ggctctgagt atgtcaattt gtaagct 387

<210> 2211
<211> 411
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021b04b1

<400> 2211

ggctggattc catcattaaa acctcactgc ttgtttcctg aaaccacagg cgcagaactg 60

atggggttcc tatccacnca ncctaanagg agcatgggca ttcggcacta ttaaccgnat 120

ccatgatttc atcgagccag ggcataagat cttctggctc tcagttcttg acgtcgggac 180

agctgcacta atggtagcaa acctatcaaa taaataagtt ataaaattcg ccatagatca 240

tctttgctct tcccgagtcg atgttctgaa tgttgtattt tcagggcttg ttcaattcaa 300

tagcctatgg tttcaacagc tcagtgcgtc gagcaatcca tgagagactg gagctgtaag 360

tcaccaccga tctctttggt ttgctatatt attcccaata atcaatgaag c 411

<210> 2212
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021b07b1

<400> 2212

tctagcggat ttggatttct ttaacaacta aggttcctgt ttttaacatt gtaatttcca 60

gggtgtttgc ccatctccaa tagctaacaa gaactctttc ttttctttac aaatcccaaa 120

acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttc 180

ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct tgaaagaaa 389

<210> 2213
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021b12b1

<400> 2213

ccgcacctag caaatggtga gccaagaaag ccaactgacg gcattgcaca tgagttgaca 60

agtaatgctg ctgctgctat tcaacgagat cgattctaac ctcaaagcgc ccagatccca 120

atgacgagct cgtcgacgat gtccaccacg ttgcagtcgc gccatgggcc ccgaatgcga 180

accccgtcga catggcctgg tccgttgtgc cggtactgcg atccggcgac ttgtcccatt 240

cgaccatcca gttctcgccc tcctcgtcgg cgcttcagag cttcgccgtg accctgcaac 300

aggtggcccc ttcgaagctg tccagccaca gccgcagcgg cattgagatc ctcgtcctcg 360

acgttgctcc ccttgcgcta gacacggtgt tcgtcaacct ggagagcgaa ttgacaaaac 420

tgctggagag cggcgagggc acctttttaca 450

<210> 2214
<211> 381
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021c02b1

<400> 2214

aaatgccaac tgacggcatt gcacatgagc tgacaaagta ttgctgcngg tgctattcaa 60

cgagatcgat tctaacctca aagcgcccag atcccaatga cgagctcgtg gacgatgtcc 120

accacgttgc agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg 180

ttgtgccggt actgcgatcc ggcgacttgt gccattcgac catccagttc tcgccctcct 240

cgtgggcgct tcagagctcc gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca 300

gccacagccg cagcggcatt gagatcctcg tcctcgacgt tgctcccctt ccgctagaca 360

cggtgttcgt caacctggag a 381

<210> 2215
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316021c05b1

<400> 2215

atctagcgga tttggatttc tttaacaact aaggttcctg tttttaacac tggattctca 60

gggtccttgc ccatctgcaa tagctaacaa gaactctttc ttttctttac aaatcccaaa 120

acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt ctacctttttc 180

ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc caaagtataa 240

gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg agacactatc 300

tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac ctcacaaaca 360

ctcacaagtt atatagggct cgaaagaaag tctaggtttg ggtttgggtt aactgctcta 420

ataaggagag tcagctactt ggattaaaaa gagtgatcaa aatgaataag aaaatccaag 480

tattttacgg tatccatgag tt 502

<210> 2216
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316021c10b1

<400> 2216

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agtaatgctg ctgctgctat tcaacgagat cgattctaac ctcaaagcgc ccagatccca 120

atgacgagct cgtcgacgat gtccaccacg ttgcagtcgc gccatgggcc ccgaatgcga 180

accccgtcga catggcctgg tccgttgtgc cggtactgcg atccggcgac ttgtcccatt 240

cgaccatcca gttctcgccc tcctcgtcgg cgcttcagag cttcgccgtg accctgcaac 300

aggtggcccc ttcgaagctg tccagccaca gccgcagcgg cattgagatc ctcgtcctcg 360

acgttgctcc ccttccgcta gacacggtgt tcgtcaacct ggagagcgaa ttgacaaaac 420

ggctggagag cggcgagggc acctttttac 449

<210> 2217
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021c11b1

<400> 2217

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gacaaagtat tgctgctgct gctattcaac gagatcgttt ctaacctcaa agcgcccaga 120

tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgcccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggcg agggcacctt ttacaaggac cattcgacaa gccccaatgc 480

caaggacgtt gccaacatga cgcccgagga gc 512

<210> 2218
<211> 401
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021d01b1

<400> 2218

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ttttaattcn cagggttttt gcccatctcc aatagctaac aagaactctt tctttttctt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa a 401

<210> 2219
<211> 454
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021d03b1

<400> 2219

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cagggttttt gcccatctcc aatagctaac aagatctctt tcttttcttt acaaatccca 120

aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataaggag agtcagctac ttggattaaa aaga 454

<210> 2220
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021d05b1

<400> 2220

tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa cattttactg 60

ccaaggtttc tttgcccatc tccaatagct aacaagatct ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg 420

ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaa 478

<210> 2221
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021d11b1

<400> 2221

cttcccgcac ctagcaaatg gtaagccaag aaagccaact gacggcattg cacatgagtt 60

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tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg ccgtgaccct 300

gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg agatcctcgt 360

cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga gcgaattgac 420

aaaacggctg gagagcggtg agggcacctt ttacaaggac c 461

<210> 2222
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021d12b1

<400> 2222

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tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta gagtcttcta 180

ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat cccaacccaa 240

agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa ctacatgaga 300

cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc 360

acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt ttgggttaac 420

tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaat 474

<210> 2223
<211> 475
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021e03b1

<400> 2223

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acaaagtttt gctgctgctg ctattcaacg agatcgattc taacctcaaa gcgcccagat 120

cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat 180

gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc 240

cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc cgtgaccctg 300

caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga gatcctcgtc 360

ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca acctggagag cgaattgaca 420

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<210> 2224
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021e05b1

<400> 2224

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gctgccgctg ctatncaacg agancgattc taacctcaaa gcgcccagat cccaatgacg 120

agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat gcgaaccccg 180

tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc cattcgacca 240

tccagttctc gccctcctcg tcggcgcttc agagcttcgc cgtgaccctg caacaggtgg 300

cccctttcgaa gctgtccagc cacagccgca gcggcattga gatcctcgtc ctcgacgttg 360

ctccccttcc gctagacacg gtgttcgtca acctggagag cgaattgaca aaacggctgg 420

agagcggcga gggcaccttt tacaaggac 449

<210> 2225
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021e07b1

<400> 2225

cggatttgga tttctttaac aactaaggtt cctgttttta acattttaat tccaagggtc 60

tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac 360

aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg ctctaataag 420

gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaaat ccaagtattt 480

tacggtatcc atga 494

<210> 2226
<211> 380
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021e10b1

<400> 2226

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cncaagggtt tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata 380

<210> 2227
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021e11b1

<400> 2227

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acgggaagca aatttttggg ctgactatca aagttaattg ggcatatgct atcggacaga 120

gggaggatac aacagaccat ttccatattg atgctggtga tcttagccct gaggtcacgg 180

atgatgcatt atttgcagtc ttctcagcat attcccctaa ctgctctgat 230

<210> 2228
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021f01b1

<400> 2228

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tattgtaatt ctcagggcta ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttgtacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaa 403

<210> 2229
<211> 485
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsfl9316021f03b1

<400> 2229

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gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

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cccca 485

<210> 2230
<211> 321
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021f07b1

<400> 2230

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acccaggtca tccgaccttg tttctagcct gcctggtttt cgaagaacat gaagtggagc 120

tccttggcct tgagtctacc ctttcaggat attcattggc ctaacttgga gctcaaagtt 180

gatgaataac tatgcatgca tggttaatag cttttcgtgg cacaatgcct ttgggtattg 240

agtaatgctt acttttggca catttaataa ctagctactg tacttcgttg ccgtgcttca 300

cattttgaac tcaaaggaac a 321

<210> 2231
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021f08b1

<400> 2231

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ccgttggaga tattgctggt ggcatctccc cgtgtctctc ccggctctat ctggcggctg 120

gtaccagccg tcgcatgttt gcagctgcag gcggtcccaa gtcaaaagaa gcaccccgaa 180

tatttcccct tgttgatgag aattccatta agtcgaagga atccctatgg gcctcgtatg 240

aatgctggtg caagtattgg ggggtatccc gtgaccgcga agagatggtc cgccggttca 300

agtcatttga ggctactgca cagtgggttt acaaaatgaa caactctggg tgttcgcaag 360

tgtctcaact gggcccgcat gcagattttt c 391

<210> 2232
<211> 390
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021f09b1

<400> 2232

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct ggcnctattt 60

ttggattttc cagggctnan gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg 390

<210> 2233
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021f10b1

<400> 2233

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cgttgtgccg gtactgcgat ccggcgactt gtcccattcg accatccagt tctcgccctc 180

ctcgtcggcg cttcagagat tcgccgggac cctgcaacag 220

<210> 2234
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316021f11b1

<400> 2234

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gttttgaact tatggggata ctatccactc attctaatag gatcatgggc attcggcact 120

attaaccgta tccatgattt catcgagcca gggcataaga tcttctggct ctcagttctt 180

gacgttggga cagctgcact aatggtagca aacctatcaa ataaataagt tataaaattc 240

gccatagatc atctttgctc ttcccgagtc gatgttctga atgttgtatt ttcagggctt 300

gttcaattca atagcctatg gtttcaacag ctcagtgcgt cgagcaatcc atgagagact 360

ggagctgtaa gtcaccaccg atctctttgg tttgctatat tattcccaat aatcaatgaa 420

gcttgatttt tatgaaaccc ttggtctgct agattc 456

<210> 2235
<211> 463
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316021f12b1

<400> 2235

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tcttaattcc agggctttng cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa aga 463

<210> 2236
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021g05b1

<400> 2236

ggatttcatc attaaaacct cactgcttgt ttcctgaaac cacagtcgcn gaactgattg 60

ggatactatc cactcattct aataggatca tgggcattcg gcactattaa ccgtatccat 120

gatttcatcg agccagggca taagatcttc tggctctcag ttcttgacgt tgggacagct 180

gcactaatgg tagcaaacct atcaaataaa taagttataa aattcgccat agatcatctt 240

tgctcttccc gagtcgatgt tctgaatgtt gtattttcag ggcttgttca attcaatagc 300

ctatggtttc aacagctcag tgcgtcgagc aatccatgag agactggagc tgtaagtcac 360

caccgatctc tttggtttgc tatattattc ccaataatca atgaagcttg atttttatga 420

aacccttggt ctgctagatt ct 442

<210> 2237
<211> 535
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021g06b1

<400> 2237

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taatctcagg gcttttgccc atctccaata gctaacaaga actctttctt ttctttacaa 120

atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct agagtcttct 180

acctttttctt atcattgaat caaccccttt ttttttttct tttaaacaca tcccaaccca 240

aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga actacatgag 300

acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg aataagacct 360

cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg tttgggttaa 420

ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa tgaataagaa 480

aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga taatt 535

<210> 2238
<211> 140
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021g11b1

<400> 2238

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atgacgagct cgtcgacgat gtccaccacg ttgcagtcgc gccatgggcc ccgaatgcga 120

accccgtcga catggcctgg 140

<210> 2239
<211> 351
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021h02b1

<400> 2239

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tggaattctc agggcgaang cccancncca atagctaaca agaactctgc ctttgcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat c 351

<210> 2240
<211> 358
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316021h03b1

<400> 2240

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catctccaat agctaacaag aactctttct tttctttaca aatcccaaaa cctttactag 120

actttgtctg ctcctttagc ttacttcacc tagagtcttg tacctttttct tatgattgag 180

tcaaccccctt ttttttttttc ttttaaacac atcccaaccc aatgtataag cgcccaccta 240

gtcctatcta gtccgaaaaa tgcgaactag aactacatga gacactatct ctgtcgttac 300

gaacctaaca ctttctacca agcttaatcg gaataagacc tcacaaacac tcacaagt 358

<210> 2241
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021h06b1

<400> 2241

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acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa gcgcccagat 120

cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat 180

gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtgc 240

cattcgacca tccagttctc gccctcctcg tgggcgcttc agagctccgc cgtgaccctg 300

caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga gatcctcg 358

<210> 2242
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021h07b1

<400> 2242

aaagaaatgc tgctgctgct attgaacgag atcgattcta acctcaaagc gcccagatcc 60

caatgacgag ctcgtctacg atgtccacca cgttgcagtc gcgccatggg ccccgattgc 120

gaaccccgtg gacatggcct ggtccgttgt gccggtactg cgatccggcg acttgtgcca 180

ttcgaccatc cagttctcgc cctcc 205

<210> 2243
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316021h08b1

<400> 2243

cacctagcaa atggtgagcc acgaaagcca actgacggca ttttacatga gttgtcaaag 60

aaaagctgct gctgctattc aacgagatcg attctaacct caaagcgccc atatcccaat 120

gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac 180

cccgtcgaca tggcctggtc cgatgtgccg gtactgcgat ccggcgactt gtgccattca 240

gaccatacag ttctcgccct cctcgtgggc gcttcagagc ttcggcgcga ccctgcaaca 300

ggtggccccct tcgaagctgt ccagccacag ccgcagcggc attgagatcc tc 352

<210> 2244
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023a03b1

<400> 2244

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ctcgtcgaag aagtgatggg ggaggtgctc ggcgtgttct tgtacatagt agatgtaggt 120

tcagtttccg ttctggtgtg ttgggcgtga tgcctaggac tggcgatatg ccgatgagga 180

gcgcgccgcc tgcgcgtacg agcagcgcat ggtggctagc ggcgatgctt tggttggtgg 240

cggtggcgtg gtgctactcg ctgctgcgtg attcatcgtc ggcgcatcct gcaataagct 300

cggttgctgc catgatttgg ag 322

<210> 2245
<211> 175
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023a07b1

<400> 2245

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ccgtgtgaga gagatgggga ggcgccgagc cggcggcggg gggcgcggag gaggcatagg 120

tcgaggccga ggagaaggac ggggtggagg agaggaggag gatctgcatg tgcac 175

<210> 2246
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023a11b1

<400> 2246

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ttaagcaagg gctcactcct tatgtcaatc tcaaccacta tgatatccct cttgcgcttc 180

agaagaagta tgatggcttc ttaagcccaa agatcgcgaa catatttgcg gactatgctg 240

aattttgttt caagacttat ggtgatcgaa ttaagaactg gttcacattc aatgagccaa 300

ggatagtagc agcacttggc tttgatactg gaacgaatcc ccctaacagg tgcaccaaat 360

gcgc 364

<210> 2247
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023b02b1

<400> 2247

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gctgccgccg gctcggccgc ggtggcggcg gcccccgtct ccaaaggcag catggggaga 180

tccgcggtgg acgctttggg cgctcgctgg gcgtgggcgc gagatgcgcc gttcgtggcc 240

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cggtggaagt gccagcagag ctggatgcgt ggc 333

<210> 2248
<211> 317

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023b03b1

<400> 2248

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cgtggcggcg gggggtgccg cggcgcaggg cgtgggctcg gtcatcacgc ggtcggggta 180

cgcgagcatg ctgcccaacc gcgacaactc gctgtgcccg gccagagggt tctacacgta 240

cgacgccttc atcgccgccg tcaacacctt cccgggcttc ggcaccaccg gcagcgccga 300

cgacatcaag cgcgacc 317

<210> 2249
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023c06b1

<400> 2249

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ctgcaacatg taccccgagg gagaggccgc cggcgccacc ctcctcgtgg ccgccaccgc 180

cacccacaag gcgagctcca ccgggatgga gatcgcaccg gaggatggca gctgctgctg 240

cacccagtgc aagagctgca ccagctgcgg gtgctcctgc tgcacctgct agatcattga 300

tcatcgatca tgcatgcacc gcgcgcatgc atcatatc 338

<210> 2250
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023c10b1

<400> 2250

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cgtggcttac ggcgcctgca taaggagagg caagcagtcg ccgagcgaca gcgttcagaa 180

ggaactcgcc gacgagcttc gagcaaaggt tgcagatgag ttcatcaagc gaagaggaga 240

taccgaatgg ttcctcgaag gcaatttcga gagctatgtg cgtaagatga gaaagcctca 300

tgcctggggt ggagaacctg agctgctcat gtgctcccac gttcttggga tgcccatcac 360

cg 362

<210> 2251
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023e02b1

<400> 2251

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tgaaactaag gatactgata tcttggcagc attccgagta agtcctcagc ctggggttcc 180

gcccgaagaa gcaggggctg cagtagctgc cgaatcttct actggtacat ggacaactgt 240

ttggactgat ggacttacca gtcttgatcg ttacaaagga cgatgctatc acatcgagcc 300

tgttgctggg gaagacagcc aatggatctg ttatgtagct tatccattag acctatttga 360

agagggttcc gttactaaca tgtttactt 389

<210> 2252
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023e03b1

<400> 2252

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actaaagcag gagttggatt taaagctggt gttaaagatt ataaattgac tgactacacc 120

<210> 2253
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023g08b1

<400> 2253

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atagaaggcc aatgtctttt agaagatcag aattttgttt ggcatgcgac atctaataac 120

ctggcgatcc aggtgaatag agttatgcac catctggctg ctccgggtat gtactctata 180

tttgtggggt ggaagatgaa agcatgtccc atgctctgat ggcttgcccc gaggagagct 240

ctacgcatgg agttgaagga agtttggaat attctgggga gtgaaatctt caacttctta 300

aggctcgatt ggatgcttct cttgttggat cagttaacct caacatacct tattcatatt 360

ctagggagct tggcact 377

<210> 2254
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023g12b1

<400> 2254

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aacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg gc 102

<210> 2255
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023h01b1

<400> 2255

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acatgtctaa atctggggca cacaagagca ggcttgaaga acaacataga gctgagaaga 120

aaattcggga caccaagggg gagcaattta ctccaaaatg gttcaagatg acggaagaca 180

tctcccctac cccgtggggc gacctggagg tgtatgaata caatggcaga tactccgagc 240

accgggctgc gat 253

<210> 2256
<211> 182
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316023h02b1

<400> 2256

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cacacaagag caggcttgaa gaacaacata gagctgagaa gaaaattcgg gacaccaagg 120

gggagcaatt tacttcaaaa tggttcaaga tgacggaaga catctgccct accccgtggg 180

gc 182

<210> 2257
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316088b04b2

<400> 2257

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aagaggcact agaataagaa aaatagtcgc gtgctgataa gagaatgggc ttacatttta 180

cctactctga aagcaggcaa gattttatct gggggatgtc gggaatggca caacaatgaa 240

gctcgggggt aatatggcga cggggagcat ga 272

<210> 2258
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316088b08b2

<400> 2258

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atggcggacg tcgacgttga cacggaggtg gccgcgggcg cgcagccgaa gaagaggacg 120

ttccgcaagt tcagctatcg cggcgtggat ctcgatgccc tcctggacat gtccaccgac 180

gaccttgtcc agatgttccc cgctcgcgcc cgcagaaggt tcaagagggg tctcaagagg 240

aagcccatgg cgctcgtcaa gaagctgcgc aaggcgaaaa aggacgctcc tgctggtgag 300

aagcctgagc cagtgaggac acatctgcgt aacatgatca ttgtccctga gatgattggc 360

agccttatcg gtgtctacaa tggcaagacc tttaaccagg ttgagattaa gcctgagatg 420

attggccatt accttgcaga gttctctatc ttctac 456

<210> 2259
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316088f02b2

<400> 2259

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ttgttcaagc acacaactgc tgtatttcgt aaattgtgac gtgttcatat gatttttac 120

tgaaggtgct tgtcaattat aggtgaaaaa cttggcatgg aggcgcatag gattgctgct 180

tctgtttttg gattggccct tgcgagggag accgaagcaa actccagcag gtttcaggga 240

taatacaacc aatccaacta ctacctttgg tgtgcttttt ggatggacta atctgaagat 300

gctgactagc ttgcaccacc atcatatagt cacgaagcaa gggcaaggat tatagggaaa 360

ataaaggcaa ttcaccatcc ggaggaaatg ccaactaata catttttgta ctttctctat 420

tactatt 427

<210> 2260
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316088f03b2

<400> 2260

cttgttgcca cctttaattt gcttacagct gcggagagcg ccaattccgg gggcgggggg 60

ggtcaccatg ctgggggtga ggaagggcgc ggcgactgtg gagctcgggt cgctgacgat 120

gaggaggaag ggcgccccgc ctccggctcc cccggtggtg ccggtggagg aggggaagaa 180

ggcgccggcg gtgggggcgg ggaag 205

<210> 2261
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316088f10b2

<400> 2261

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agaaggtgac cctcaagtac atggccaatg actccagccg gcgcagtagg tttaggaagc 120

gtctcggggg gctgatgaag aaggcggccc agctggccac cctgtgcgac gtcaagacct 180

gcgtggtggt gtacggcgag cgcgaggcgg agcctaaggt attcccttgc cacgccgagg 240

cggtggatat cctcaacgaa tttaaaagca tgccacagct agggcattgc aagaagacga 300

tggaccagga ggccttcctc acccagcgca tcgccaagct ccgggaccag gtcgacaagg 360

ctcgccgcga gtgccaagac agcgagatta ggtacctgct ttacaacatc atgcacggta 420

accaccc 427

<210> 2262
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316088g02b2

<400> 2262

acaaatgtaa tctgctgctg gccgcctgtg aatatgtgca catccggcta atgctagagg 60

gaagaaagt 69

<210> 2263
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316088h09b2

<400> 2263

tggtatggcc gatccagcgg agcaccgcga ggaggaggag taggccacgg ccgccggtga 60

ggaagaggac accggcgccc aaatcgctcc catcgtgaag ctcgaggagg tggccatcac 120

caccggcgaa gaggacgagg acgtcctcct cgacatgaaa gcgaagctgc atcgatttga 180

caaggacggg ggccagtgga aggagagggg cacgggtgcc gccaagctgc tcaaacacaa 240

tgagactgcc aaggtccgcc tcgtcatgcg acaggccaag accctcaaga tctgcgccaa 300

tcacctcgac gtggccacga cgaagatgca ggagcacgct gggagcgaca agtcgtgc 358

<210> 2264
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316090b10b2

<400> 2264

ttttcaatgt tgccagcagt tgccgcaaat cccccagcaa tcccgctatg aggcaatccg 60

tgctatcatc tactccatca tcctgcaaga acaacaacag gttcagggtt ccatccaaac 120

tcctcagcag caaccccaac agttgggcca atgtgtttcc caaccccaac agcagtcaca 180

acaacaactc gggcaacaac ctcaacaaca acaattggca caaggtacct ttttgcagcc 240

acaccagata gctcagcttg aggtgatgac ttccattgcg ctccgtaccc tgcaccgatg 300

tgccgtgtca atgtgccgtt gtatagaacc accactagtg t 341

<210> 2265
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316090c07b2

<400> 2265

ctcatacatt ccacaacttg ggggtgagaa tttcgagttt ggagaatgca catttgctcc 60

agttccatcc ccagcttctg ctaggccatt cattggtaac aagatgggag aagaatcatt 120

agtaaattac gctatgaacc agagcctgta ccctctggta ttgggctcga catggaagaa 180

tctcgaaatg gctcaaaagt gccagaaagt gttgttggga ttgctccgct acctgagctg 240

aataaatcca aaaggggatc ccaaacagaa agatatagta aaccatcaaa accagcaggt 300

ttacttgaac gaatgctcat gttctccagt ggggttggca ttggtatttt atcttcctct 360

ctatcaagca aaaaagatct t 381

<210> 2266
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316090c11b2

<400> 2266

ttttgagcca accaccaccg ccgcgcgact aggagccacg agcgagctcg gccgattccg 60

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gagagagaga ccggagatgg cggcttccgc gaggcagggg gagagggcga ccagcttcgc 180

catggcctgc agcctgctca gccgctacgt ccgccagaac ggcgccgacg aggccgagct 240

cggcctcgga atcaacaagg gtgaggccga ggctcacagg acggcggaca ccaagagccc 300

tttgcctgcg gcggagggcg aggaggccgg caggaagaag gagaccatgg a 351

<210> 2267
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316090e01b2

<400> 2267

ttgtcttcga ccagcaccac cgccgcaacg ccagggcaac tgtgcgtccc gttggtgatc 60

atcaggcgcc accggtcgcc ggcagtgctg cccgagacga cgatcatcgt cgtcgggcga 120

acgccacaac aatcacaaag cccaattcta ccaccacaag tcatcttccc agcacgcgtc 180

ggcatgaaga aaagggagcg aaggaggatg cggagttccg ggggctggcg gcggcggtgg 240

cacgcgcggc aacggacgac cggacggtga tcatcacgtg cgtgaaccag gcttgggcgg 300

caccaggctc cttactggac ctgttcctgg agagcttccg catcggcgac ggcacggcgc 360

ggctcctcct acacgtgctg gtcgtggcca tggatcccgg cgcccatgca cggtgcctcg 420

ccgtgcacca gcactgctac cacta 445

<210> 2268
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316090e05b2

<400> 2268

aggggaagat gcctgcgggg cacgggctgc ggtcgcggac gcccgacctg ttcgcgcggt 60

ccttccgtaa gaaggggtac atcccgctca ccacctacct gcgcacctac aaggtcgggg 120

agcacgtcga cgtcaaggtg aacggcgccg tccacaaggg catgccgaac aagttctacc 180

acggccgcac cggccgagtc tggaacgtca ccaagc 216

<210> 2269
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316090f08b2

<400> 2269

tttaccggct gggactggcg ctccatcccg caggggctct cctccgcctg catcttcatc 60

tgctccggag gctgttttgg atgctgtgag aaggccgcaa aacatgtagg cgatctttcc 120

aagagcttaa tagcccatgc ccagaatcct acggtggcag aggaattttg gagtacgacc 180

accatcgagg ttgatccggc agacctacga gcaccataca acacatcctc ttgggacctt 240

gatctgcatg gagtcggaag cagtcataac ctgggcgaat ctgctaatca tggtttttct 300

ctttggcaac aaactaggga tgagtggact gagaatacaa ggttaaggca agaaccggtg 360

gtgaagcaga tccaggaacc agtgttgagt tggaatgcag cgtatgaaag tttgcttgga 420

tcaaataaac cattccctca gcccatccct ctacatgaga tg 462

<210> 2270
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316090f12b2

<400> 2270

gcatcttgcc gggcggtagt gttgctgggt tccagattga ctgactgcgc caacttcttc 60

agccatgtcc ggggatggcc agagcggctt cgcaagggtg cactccgtgc tggtcccgat 120

gatggcgcag ggtcacataa tccccatgac cgacatggcg agcctgctgg ccgagcacgg 180

cgcgcaggtc accttcatca ccacgccagt gaacgcgtcc aggttggcga gctttgccgt 240

ccacgtggag gagacaggct tggcggaccg actcgtggag ctccatttcc cggcagccaa 300

gtttggccta ccggacgggt gcgagaccgt cgacatgatc caatcgcagg atctgctgtc 360

gaacttcttg gaggcatgc 379

<210> 2271
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092b06b1

<400> 2271

cttatgatcg gggcgtttgc agctccagac aggatccact gggcgccggg gctccccaag 60

acccgcagcg gcaagatcat gcgcaggatc ctgcgcaaaa ttgccgcgaa gcagctggac 120

gagctcggcg acataagcac tctcgctgac cccggcgtcg tcgaccagct gatcgcgctc 180

aaagattgct aggatgtaaa gcagttatgc gactgttttt tcccctatgc ggttatgtgg 240

ttggtagaag gttgatttta gtgctcgcta gtccttttaa tcagtgcgat tttctcctga 300

ggctagtgag ctgcagcg 318

<210> 2272
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092b08b1

<400> 2272

attcaatcgc aggtggaatc tgaagctaga agagctcttc aagcagactt ggatgaggcc 60

actgtttcac taaatgaggt gaatgagagt acattatttc tgtctaataa gcttgatagc 120

actgtttcca ggatttctgc tattaaagaa gagaaagagg ttctttcagc ggctcttttg 180

gagcaaaaga aaagtacagc cgaagctcag aaaaatatgg tggatgctca gcatcttatt 240

aaaaggcttg ggatggagag agagaatagt gaaatcagga gtacaaagct tgaagaggag 300

ttggccacag caaaaggtga gatgttatat ctgaggaggc agattactgc aagtgggtca 360

cagaatacag atgttttgga agcaagccca aca 393

<210> 2273
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092b10b1

<400> 2273

tcggtcccct cgcgcgttcc gcctcccagt tgcggctccg gtcgttcccc tcctcctcgg 60

ttgctgagat ggccggtcgt gggaaggcaa tcggcgccgg cgcggccaag aaggcgacgt 120

caaggagctc caaggctggg ctgcagttcc ccgtgggaag gatcgccagg ttcctcaagg 180

ccggcaagta cgccgagcgc gtcggagccg gcgcccccgt ctacctcgcc gccgtccttg 240

agtacctcgc cgctgaggtc ctggagctgg ccggaaacgc cgccagggac aacaagaaga 300

cacgtatcgt gccccgccac atccagctcg ccgtgcgcaa tgacgaggag ctgaccaagt 360

tgctcggcgg cgccaccatc 380

<210> 2274
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092c01b1

<400> 2274

gttctttggt ttcaaatttt cctggcgagg acccaaaaat gctctccaat tttaaagacc 60

ttcttgaaaa aatatttgtc ttagatccag ataagaggat aaccgtatca caggcactta 120

gccatccatt tatcactggc aagtgaaaat aagatgttga ttcctcttga cattgtaaac 180

tacaatttgg gttcctcttg tctaatcatc ggcatttcta tcttgtgtct gggagctatg 240

agatctgagt gcgtgcccaa atggacgaag catggggttg ctgaagagat gctgtcttac 300

ggaccttgct gcatgcactt accatttgga tagttctgct gcttggattc tgccagggcc 360

tctgctgcat gcacttatat ttcctaaagg accaacaaa 399

<210> 2275
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092d04b1

<400> 2275

ttggtttgga gggaaattgg ggcacgtacg ttataccgcc gatgcgtctg aaggtttgag 60

aagatggacc tgactgtcta tcagtttgga attactgtcc gatggtctaa caaaaaagtg 120

gttatgggac agttaaagtt ttattttgca tgtctttgaa tcacgtagct ggatcatcgt 180

tttctagcat gtgtggtaca tccaaatatg caagtaagac gaattgcaag ttttattttg 240

c 241

<210> 2276
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092d07b1

<400> 2276

tcgatttagg tttcagttca ctttccctga acccgattat ggggagtacg gctctgattt 60

cggtgaggaa gaggagtgtt taccgaggca gaggaaacct cccgaagtaa ggaatgcact 120

ccgtgagaag agagtcgcgt ttaggcaaaa gactgggcgg caccatgcaa aggtagccct 180

gcgtaagtac aacagagcaa acaacaccaa gtttgagctg gtggaggtgc cagtgatccg 240

tgagttttgg gagtttggag ggggctgcat ccattacaac ttcacggcta agcaagcaga 300

ggatcatcgt cattctgctg atgcagacaa caccaagctc ttcttctctg aggtcaactc 360

tgctttccat ggcgacaagg atgtggtcct gtgctgtatc gttggagaac atgacaatgg 420

gcattgctat g 431

<210> 2277
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316092e12b1

<400> 2277

agctgatttt cttcggcggc atcgcgaaca cgttcatgct cgcggccggc ctgtcgatcg 60

gcaagtcgct cgcggaagcc gatctcgtca acgaggcaaa ggcgatcatc gacgaagcgc 120

gcgagcgcgg cgcgtcggtg ccgatcccga ccgacgtcgt gacggccaag gaattctcgc 180

cgacggccgc ggccacggtg aagcaggtcg ccgacatcga agcggacgac atgatcctcg 240

acatcggccc cgatacggcc aaggcgctcg cgagccagct cgagaaggcc ggcacgatcg 300

tgtggaacgg cccggtcggc gtgttcgagt tcgaccagtt cggcaacggc accaagacgc 360

tcgctgaagc aatcgccaaa tcgtccgcgt tctcgatcgc gggcggcggc gacacgctcg 420

c 421

<210> 2278
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316092g02b1

<400> 2278

gctagttatc gcctccccac ctagcaattt acgtactccg ccatggcccc agccgtgatg 60

gcttcttccg ccaccaccgt cgcgcccttc caggggctca agtcgaccgc cggcctcccc 120

gtcagctgcc gctccggcag caccggcctc agcagcgtca gcaatggcgg aaggatcaga 180

tgcatgcagg tgtggccaat tgagggcatc aagaagttcg agaccctgtc ttacttgcca 240

cccctctcca cggaggccct cttgaagcag gtcgactact tgatccgctc caagtgggtg 300

ccctgcctcg agttcagcaa ggttggcttc gtcttccgtg agcacaacag ctcccccggg 360

tactacgacg gtcgatactg gacaatgtgg aagctgccta tgttcgggtg caccgacgcc 420

acacaggtgc tcaacga 437

<210> 2279
<211> 255
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316093a05b1

<400> 2279

cccagatcca tcctctcctt tcctgcaacc gccgccgccg atctccactc ccccaaaccg 60

ccccgccccg ccggcgacct ccgccttcct ctcccctagc cacctcgcct accctcgccg 120

cctcgccacc cctctccgcg ctggcgccct cctggagcac ggaggtggtg ctggcctcct 180

acctccgtcc cgaccgacgc tcacgtccct ggcgcacacc ctgcgcctcg aagacgcccc 240

gctgcgctgg atcgt 255

<210> 2280
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316093c05b1

<400> 2280

gtccacctgg ccaccatccc catcaccggc accggcatca acccggcccg gagcctgggg 60

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cccatgatcg gcgcggcgat cgcggccttc taccaccagt acatcctcag ggccggcgcc 180

atcaaggccc tcggctcctt caggagcaac gcgtaacaag ttatcatcca tgtcatctgt 240

atgcaagact gaagcaatgg cgacccgtgt tgtgtccatc catccagaga gaaatgcgct 300

tttgcaactt ctcgacagtt cagttcggcc gccgcaatgg tcgtgttatt atgtgtcggc 360

agctgcatat gcgtagtacg tggtccggtc atg 393

<210> 2281
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316093c10b1

<400> 2281

gtcccctgca ggcccagcac cgccaactgc tccgccaccg ccaagaacgt ctgcccgccc 60

tacctcgttg tctacggctc cggatccacc gcggggctcc tcgtctccga cacgctgcgc 120

atgtcgccac ggggcgccgc cagccgcaac ttcgccgtgg gctgcagcct cgcgtccgtg 180

caccagccgc cgtcggggct cgcggggttc ggccgcggcg cgccgtccgt gccggcgcag 240

ctcggggtca ccaagttctc ctactgcctc ctctcccgcc acttcgacga cgacgccacc 300

gtca 304

<210> 2282
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316093d09b1

<400> 2282

gggcaaagaa tcactctggt gacccagaga ttgatgaagc tttaaagaag ggagaagatg 60

ctggccttgc cttggtgaag aaagcgtatg tgtacattca caagaatggg tacaagaca 119

<210> 2283
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316093e10b1

<400> 2283

ttttcgttgg gctcccacgt tcaggggggag gatcaagtcc ccgtctatga atcgggtgca 60

gatgccctgc agaagctgca ggagaaatgg aagtccacgg cggcgccgta cccggccatg 120

tactcgagct tcttgggcgg catcgtcctg gacccggcca tgatggccct ccccatcgac 180

gaccacatgg tccaccgcgg ccacggcgtc ttcgacacgg ccatgctcct agacggccac 240

ctctacgagc tcgacacgca cctagatcgt ttcctgcgct ccgcggcgca ggccaaggtg 300

ggcaccccgt tcccgcgcga cacgctgcgc agaatcctcg tgcagatgac g 351

<210> 2284
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316093e11b1

<400> 2284

ttaaatactc ctcctccacc tagggttttg ctgcctccct cccccaccgc cgccgtcgcc 60

gcccgcgtcc accatggcgc tgccgaacca gaacaccgtc gattacccca gcttcaagct 120

cgtcatcgtc ggcgatggcg ggactggcaa aaccacattt gtgaagaggc atctcactgg 180

agagtttgag aagaaatacg aacccaccat tggtgttgaa gttcacccgt tggatttcac 240

cactaactgt ggaaagatcc gtttctactg ctgggacact gctgggcaag agaagtttgg 300

tggccttagg gatggatact atatccatgg tcagtgtgcg attatcatgt ttgatgtcac 360

ttcaaggctg acctacaaga atgttcctac gtggcacagg ga 402

<210> 2285
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316093f01b1

<400> 2285

ttttcgttga gaagaaaaag gaaaaaaaaa aaaaaaggcg aggcgaaccg cgcgcgctca 60

cgggatccgc ggcagccagc accgtcgcct cttcccgccg atccgccccg tcccgcccga 120

tcggcatggc ggacggggac tcggcggcgg cctacgcgcc gccgcggtcg ccgctcccgc 180

ccgagacgcc gtccacgcag aagcggaggc agcgcggcct cgtctcgcgg gtctggaa 238

<210> 2286
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316093f06b1

<400> 2286

cttagtttct gagatcacca ccactctgta cagaagatga cccagatagt gcttggtatg 60

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gtggcccagt ggagaaatgg cctcaaagac ttgctgcagt gccaccaaga atagccaata 180

gggaaatcaa ggggatgtcc atccaggcat acaaacatga cttttcaatt tggaagagaa 240

gagttgaact ctatggaaca tatttgaaag atttatctca caggagttac agaaatgtca 300

tggatatgaa tgctggtttt ggtagctttg ctgcagccat gttgaaatac c 351

<210> 2287
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094a09b1

<400> 2287

ctgggtattc aacaatggaa tcatccacaa tgatgaaggt agttccgctg ccattgcccc 60

ttttgtaaag gatgtattgg acagcctaga attcgcaagg gggagtgcaa actcaacatg 120

gggctctgtt agagctgcaa tggggcatcc tgaaccgttc ccagtcaaat atgttgcgat 180

tggaaatgaa gattgcggga aaaaatacta cctcggtaat tacctcaagt tctacaatgc 240

tataagagaa tcctatccag acattcagat gatttcaaac tgtgatggtt catctaaacc 300

acttgaccat cctgctgaac tgtatgactt ccatgtctac accgattcta agact 355

<210> 2288
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094d06b1

<400> 2288

acaagaccgt ccgaacctga gatttatggg cataagagat ctgaaagaga cgcatgtggt 60

cccgtcctgg atctcattgt ttgctgaatt tttgtggacg gaagaatttt acggtgcttt 120

gtggatgttc cttatggatg ggggctggga gtctcacgtg gaagaattga ttcatatggc 180

ttctggcggt caatgccgta gtgtcgcatt atcgatccca gctagccgta aacagattga 240

catatatctt gaattatttt gttagtggac gtatgatcaa atggattcag agatactctt 300

tctgttccaa aaggagggag tagtgattcc cgctgctatt tcatctttgg gtaagtagta 360

taccccgcaa aa 372

<210> 2289
<211> 402
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316094d07b1

<400> 2289

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tattttacta aataactatg gactagctac tatttttaca atgggttact tattagacta 120

gggacgtgtg atatctttct cccgttgcaa agctaaacca cgtcgtgtca tctttgtagt 180

ttacatattt tttagatgtg ttggcacaca ttttgaggca tcattttctt tcaagtcgtt 240

catcatcatt ggtcccattc tgcacaagac tatcgatgat accactctgc attggaccta 300

cacaatcatc aattttacca atgtcacaaa tggtctgtct tgtaatgtga cattatggct 360

aactgtttgg tttaaattat ggctggtaga tgtccttgga tg 402

<210> 2290
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316094e04b1

<400> 2290

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gaccagctga tgctgacgga gtcggccgtg gagatccgac gccgctttga ggatcaccgc 120

ggcctcgccc cgggatcgga ggacgccgtc cgcgccctct ccgaggcccg cgaggccgcg 180

gacttcatcg ccaacatgat cgtccaggct aagcgctcac cctccggatc cttcgttgtg 240

aagcctgaga aggcacatgc cggagctacg cttgagattc cttccgagga gatcctgtct 300

acgttgaaat aggggaggtt tgcattatcc actgtgcaag cgtcactgat aggctagtta 360

taataagacc a 371

<210> 2291
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316094e06b1

<400> 2291

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gcaagcttgg cgattgggat tcaagcgcca gcgctccaaa tccggcggag gggtggcgcg 120

cgccggcggc ggcgatttcg atttgtggta gtcctcaccg ctggaggcgg ctgcccgatc 180

cagccacctg agaacaaact cccgaccatc cctccttgcc cgcgtatata ggccgtactc 240

gttttcgcca ccatcctcga cgcgtctggc gtaagaggct gggggtggtc ttggtggcgg 300

cacacatccc aggaaggagc gagtgg 326

<210> 2292
<211> 351
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094f03b1

<400> 2292

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gcctcgcccc gggatcggag gacgccgtcc gcgccctctc cgaggcccgc gaggccgcgg 180

acttcatcgc caacatgatc gtccaggcta agcgctcacc ctccggatcc ttcgttgtga 240

agcctgagaa ggcacatgcc ggagctacgc ttgagattcc ttccgaggag atcctgtcta 300

cgttgaaata ggggagggtt gcattatcca ctgtgcaagc gtcactgata g 351

<210> 2293
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094f08b1

<400> 2293

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ttgcggcggc cctcggcttc tccggcgagt gactgttcca gctcggggag gcgcgaccct 180

ggctgatcct gtgctcgatg gggcagacta atctctgccc agatccggtg cgcgccgatg 240

tggtctcgca agatccgggc agcacacgcc ctgaagatgc cgtcatggtt tgctggttgc 300

tcacgctccg gatgcaaaat tctgggtcga c 331

<210> 2294
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094f11b1

<400> 2294

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ccaacgtggt ggcgcccggc tacaccaagg gctccggcct cggcgccgag atcatcggca 120

ccttcgtcct cgtctacacc gtcttctccg ccaccgacgc caagaggaac gccagggact 180

cccacgttcc catcctcgcc ccgctgccca tcgggttcgc cgtgttcctg gtgcacct 238

<210> 2295
<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316094h02b1

<400> 2295

aaatataaaa aaaaaaaaaa aaaaagagaa aaaaaagaaa aaaaaaaaaa aaaaaaagca 60

aaaaaatggg gcggccgatc tagagg 86

<210> 2296
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316095b06b1

<400> 2296

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ggtcaagaag gagtaccctg acgcgtatgt ccgcatcatc ggattcgaca acatgcgtca 180

ggtgcagtgc gtcagcttca tcgccttcaa gccaccgggc tgcgaggagt ccggcaaggc 240

ctaaacagct cactcacgac aggccatata taaagtgcca ttgcagtttt gtcaactctg 300

acattgcttt gggttttcct tctccattta tctttcttat ttgttcctaa gaatatgtgt 360

atgtccatgt tcatgtacca acat 384

<210> 2297
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316095d06b1

<400> 2297

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aagacggaag taatgctgcc cctgttcact ccagttagaa ctactagtta ccgtttctgg 120

tggcgcaacg ccttcagtgc cttatattca attggcatgt agcatagtat tctttcttgg 180

agctgcaccc tcgcaattct taggctcgtc tcgtatagta gaaaataata gctctaccct 240

tcaataagcc tataagcagc gcaactgcag atg 273

<210> 2298
<211> 123
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316095e10b1

<400> 2298

ttcgatcatg ccgtgtctgt tgtaatgctg tggaagaagt taagcaaact gtcttgtgta 60

ccaacgtttg ttattcgtgt aggttgagtg taacgagtgt aataaggaca cagagctcta 120

gtt 123

<210> 2299
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316095g06b1

<400> 2299

gctaagtcca tggagcaggg cgccgtcgac gcggtgacca aatggcaaac gctcgcaccg 60

gtgctccccg acgacctcag cgtacgtgtc gtcatccaga agagccaggc caacttccag 120

tccctgtacc tcggcaactg cagcacggcg gtggcgacga tgcgcagccg gctcccggag 180

ctcggggtga cgagcgccga ctgcaaggag atgagctggc tgcagtacac ggtgtacata 240

tacttgggcg acgccatcaa cagcaagccg ctggaggcgc tcctcctcaa ccggtccacg 300

accctgggcc ccttcgtcaa gaacaagtcg gactacgtca agaaagccct caccaaggag 360

acctggaaga agatcttcct ctggcccaac ggcggcgggt cggggca 407

<210> 2300
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316095h07b1

<400> 2300

cgcccacgcg tccgtccgag acgacgattc cttccaaaag taagcaacgc cttcgacccc 60

tcgaggggtg aaacaaggca aagggagagt aatgtggcgt cgctgcattt gttgtcaagc 120

cgctgagttt gatgagaatg aaaatgggcg tgccaaggcc aaggccccaa caaataacgt 180

agatggaatg aaaaagggtt tgaaagattc tgctactgtg aaagccgagc cacaagattc 240

agctccctgt atcaatat 258

<210> 2301
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096b01b1

<400> 2301

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ggccccgccc gcttcaggtc gctcgacttc ggcgagcgca acgggtacct caagggcgtc 180

gtcaccgatg tcatccacga cccggggcgt ggtgcgccgc tggccaaggt gaccttccgc 240

cacccgttca ggtacaagca ccagaaggag ctcttcgtcg ccgccgaggg tatgtacacc 300

ggccagttcg tctact 316

<210> 2302
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096c04b1

<400> 2302

tctcttcgcg ttcgcgccgt gttcgccgtg ctcgcggcac tggctgtggc ggagatggcg 60

tccggggcgg tgacctgcgg cgacgtgacg tccgccatcg cgccgtgcat gtcatacgcg 120

acggggaagg cctcggcgcc gtccgcgggg tgctgcagcg gcgtgaggac cctgaacggc 180

aaggcgtcca cctcggccga ccggcaggcg gcgtgccgct gcctcaagaa cctggcgggg 240

tcgttcaagg gcatcagcat gggcaacgcc gtcaccatcc ccggcaagtg cggggtctcc 300

gtctttttcc caatcaacac caacgttaac ttgaacaaca ttcactaagt tatctgtcag 360

catcatcaca ccaggctcta tatggatagc tagccga 397

<210> 2303
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316096c09b1

<400> 2303

tcttcatact cagattacca tgcttttggt atatctctac tgtttgtgct ctatactaag 60

ctccttagta ctgaaagaat gctgtgattt ttcttgaatg tacaagatct gtacacgctg 120

ggtcacggtg ctcaggcggg caacgcgtgc caaggcgcgc ttccgatcta gtataggtgg 180

ttgaaggcgc gatcgaggaa ggcctggctc ggtctcgggc ggccatccgc cgggcgactc 240

gcgcgcccag ggacgagagc gtccgccgga tacggagctt cagggacgtc ggcgacgctt 300

ttgcg 305

<210> 2304
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316096d03b1

<400> 2304

ggagcaatag aagtattatt taggttcagc caccatacat gccacaggag actactccta 60

cattctatca tacacagcat agcagcagtt ttctgcgaat ttttatgtcc acagtggttt 120

ctcttcttcg agtattacaa ttaaaccggt actacttgga tagctaatct attctataat 180

ccagctagag agacagacag ctcttggatt caccactcac tgaccaagac cttgtcttct 240

tgatcaagtg aaccctccgt gctttcgcga tattccagat 280

<210> 2305
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096d11b1

<400> 2305

tcttccacgc gtccggcgct gtttctcttg tgccagggta tctaacgaag ttctataata 60

aactgctgat ctgctttaag gagtttgata atgaattgag agtcaataga agatattcaa 120

ttgatcacat caagaagaag ttccaactgc tatctagttg tcaactccaa gaggctgaat 180

ggttgcacaa aaatcacaag cccaggtttg aagataaatt gcatttgggt gccatgtccg 240

taggcgcggt agggctatgc gtgtatatga tggcttgcat gggtgataaa atgcccaagg 300

gagcactgga gtgggcactt gcataccccg atgtcatcat ggcatgtgcc aagattgggc 360

gcctaatgaa tgaccttgc 379

<210> 2306
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096e05b1

<400> 2306

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ccctctcccg gtgcgcgcct gttgctgcag acgagaagcg gctgaggcga agaggaatcg 120

accatggcga cccgtatcca gtttgagaac aactgtgaag ttggtgtttt ctccaagctc 180

acaaatgcct actgtctggt tgcaattgga ggatcagaga atttctacag tacatttgag 240

tctgagcttg cagatgtcat tcctgtggtc aagacctcta tcggtggcac tagaataatt 300

ggtcgcctct gcgttggaaa caagaatgga cttctcttgc cacacacaac cactgatcaa 360

gagcttcagc atctgaggaa ctgcatacc 389

<210> 2307
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096e12b1

<400> 2307

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ccggcgagat ggccaacccg agggtgttct tcgacatgac cgtcggcggc gcgccggccg 120

ggcgcatcgt gatggagctg tacaaggacg cggtgccgcg gacggtggag aacttccgcg 180

cgctctgcac cggcgagaag ggcgtcggca agagcggcaa gccactgcac tacaagggca 240

gctcgttcca ccgcgtgatc cccgacttca tgtgccaggg cggcgacttc accaagggca 300

acggcaccgg cggcgagtcc atctacggcg agaagttcgc cgacgagaag ttcgtccaca 360

agcacaccaa gcccg 375

<210> 2308
<211> 310
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096f05b1

<400> 2308

ttttattttg gatgtttatc aacaataaaa tatgggttag ggcagaacag taccaaactc 60

gaaaaatgca tatgaggatt ttccggaatt gttgcttgtt tttttcggtc taaattaaac 120

ttgcctaaac aggtagttta ctcatgcttc acctcttgcc atgttaacca acatttaata 180

ttgatgagta gctaaacgag aatgaactaa ataattgttg tgcatattga gctgcactta 240

atctgtttta ttgtttgttg caccttgcca tgccatgaat cattaaaccg gacattgcat 300

cacactcgat 310

<210> 2309
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316096f12b1

<400> 2309

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cgaccaagag gttcggatgg ctgtacgtgg cgcggtgggc ggcggcgtcc gtggtgacag 120

tgctggccgt ggcagtgatc attcgggccg cggtgctgat gctccgcccc cagaagctcc 180

agttcaggct ctccgggggc catgtggcag tcgactcgat cccgtcgatg ccgccgcctg 240

acaacgtcgt gacgctcacc ttcgccttcg tggcctacaa ccccagcggg cgcgcctccg 300

gcgagtacaa caacgtcacc gtccggctca cggacatcac gagcgcgt 348

<210> 2310
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097b05b1

<400> 2310

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ccccgacgtt gaggccaccg ccggcgccgc cgccatggtc atgcccaccg cctcccacaa 180

ggggagctcc ggcgggttcg agactgccgg cggggagacc ggcggctgcg actgcaccac 240

ctgcaagtgc ggcacggcct gcggctgctc ctgctgcagc tgcaactgag ccggcgccca 300

ggaggccggc cggcgaggcg agcacgagga tgaggaggac aactggacaa gcaaccacca 360

ccaccaccac cac 373

<210> 2311
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097b06b1

<400> 2311

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tccctggaga acggcacgaa accggagttc gggctggccc cgcagggcgt cgagcaggcg 180

cgctccgccg gcgagtcgct ctggaaggag cttgaggaga tgggtgtgcc ggtggactct 240

gtcaagatcc ggtactcacc gttctcgcgg acgacggaga cggccagggt ggtcgccggc 300

gtgctgggcg tcccatttga gggtcctagc tgtaaggtta ccgtggaact tcgtgaacgt 360

tattttgg 368

<210> 2312
<211> 364
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097b10b1

<400> 2312

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gatgccttgg gcttggttcg ctactgctgc cgccgtatgc tcatgaccca tgttgacctc 120

attgagaagt tgctcaacta caacaccctg gagaagacgg agacaagttg aagttaattg 180

aacccattct gcctcgaaac ctttgttcct ttgtactttc caagatgctg tttcttgcgt 240

cagtgcttag gaggtgcaaa gtgaggcact gaaatgaagt tggtttgttc atgaatctcc 300

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caag 364

<210> 2313
<211> 355
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 2313

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aagtcgatga agatcgtgtt ctcggtgctc ctgctatgta tgctcgtggc nacacccatg 120

gggtccgagt acggcgcatg gagctataac agtggtccct ggatgtgcta tccttttcag 180

gccttccagg tgcccgcgct ccctggctgt cgtccattgc tgaagctcca gtgcaatggc 240

agccaggtgc ccgaggccgt cctaagggac tgctgccagc agctcgccga tatcagtgag 300

tggtgcaggt gcggtgccct ctacagcatg ttggatagca tgtataagga gcatg 355

<210> 2314
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097e04b1

<400> 2314

ttctttcgcg tgggttcgaa atccttgaag gagaaacacc gtgcagagct agttgagcag 60

aagaaggagg agctgtacga actcctcgcc aatgcccact ccaattcctc ggcctcctcg 120

ctggacaaga atctgatcaa ggatctctct acacaaatca agcctagact agaggacccc 180

caatggtgca agataactag gaacaagaag gcgactgatt tggctgcgtc ggtggttatt 240

cttgctactt ctgctctcac ttactgcgtc ttgacagctg gtcctgaaat agtaaagtat 300

gatggacatc ttgttactgt tgagagtctg cccattctac aaggacatga gcctgctgct 360

actgctaagg gagttcacaa gcaagatgtg cagaagtgaa ggggttgaag aagagatgca 420

tcttgtttga ctatcagttc 440

<210> 2315
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097e08b1

<400> 2315

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cctcgcggcg actagcgtcg ttgcgcagct ggacactaca tgcatccagg gctatgggca 120

atgccaacag cagccacaac aacaggtgaa cacatgcgct gctctcctgc atcagtgtag 180

cccgacacca tatgtccagt cacaaatgtg gcaggcaagc ggttgccagt tgatgcggca 240

acagtgctgc caaccgctgg cccagatctc ggagcaggct cggtgccatg ccgtctgcgg 300

tgtggcccag gtcatcatgc ggcagcagca agggcaaagt ttcggtcagc ctcagcagca 360

gcaagggcaa ag 372

<210> 2316
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097e10b1

<400> 2316

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tttcccgtga gcaataggtc tgcacggaaa tcggatgaga agtggcacta tactgattca 120

agcgcacgtg aaagcgatag acattcaagg aaaccaagag aaaaatcacg ctactctgat 180

ccaagtgctt ctgagtattc cgattccgat cggccttcac ggagatcgaa tgagaagcga 240

cactatactg acttgagtac acgtgaaagt gatagacatt caaggaaacc gaagggaaaa 300

tcgcgctgct ctgatcaaag tgcttctgag tattcagatt ctgattggcg taatagtcat 360

cgccgtcgtc gaagaaagtg agtag 385

<210> 2317
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097e11b1

<400> 2317

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agtgtggaag gataacaggt ttaaactgca agagtggaat ggacttggag caagtcagct 180

ggcctgacat gggcgttcac ggagcaagaa atctcgcgca gctacaacag cagttctggc 240

atggtgattt ggcacatcca catcagccag cttcacagtg ggaaaaacgg ggggatgtac 300

aacccccctgg ctttagcaac accagttctt ctctcttcgg ctacgatctc gcaagctctg 360

gaccgcagca accgccaaca agcaagctaa aagcagagct gtgagctaca tcagtatatt 420

gcaggccagg agagcgagct acaca 445

<210> 2318
<211> 314
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316097f03b1

<400> 2318

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ggccaacgcg tggtacgccg gcggggaccc ctccttcccc accgagatcg ccgacctctg 180

cgagggcatc tacggcaccg gcggcggcgg cgcgtacacc ggccagctgc tcacctacgg 240

gcggtccggc gcgtcgtaca acctgaacgg tgtcggcggg cgcaggttcc tggtgcagtg 300

ggtgtgggac ccct 314

<210> 2319
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316097f08b1

<400> 2319

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ccagaaatgc agttatggtg ggccagatac agcaatacaa aataaggaga atgagttagt 120

gcagagcagt cgaaacgagt acctcaaact gaaagcacga gtggagaatt tgcatagaac 180

ccaacgaaat ttgcttggtg aagatctcgg gtcactcggc atcaaagatc tggagcagct 240

cgaaaagcaa cttgattcat ccttaaggca cataagatcc acaaggacac agcatatgct 300

tgaccagctc actgatctcc aaaggaagga acaaatgctg tgtgaagcga ataagtgcct 360

tcgaagaaaa ctggaggaga gcagccagca gatgcagggc caaatgtggg ag 412

<210> 2320
<211> 417
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316097f11b1

<400> 2320

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tccggaagga tgcctcgcgc ggggttgtcg gcggtttcga gcaaggtgga cgtggccatc 120

gacctcggga acccgctcct caaccgcacc gtcgacntct tcctcaagat cggcgccgtc 180

ggcgcctgca gggtggccgc cgaggacgcc ttcgactgcc tccaaagtgg gagtgtctcg 240

aagcgcaagc ttgagaagac actggaaaaa atgtgcaagg agggcgcata ttggggtgct 300

gttgctggag tgtatgtagg catggagtat ggagtggaaa gggtccccgg agagtatgac 360

tggaaaaatg cattgattgg aggcatcgca agcggcaccc tgatctctgc tgctagc 417

<210> 2321
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097f12b1

<400> 2321

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cctctcacca ttggcaacat caaggctgtc acgatagatc tctttggcgc cgggaccgag 120

acgtcagcag atgcactcca gtgggcgatg tcagagctta tgaggaaccc gagagtgatg 180

cataaagcac aggccgagct gcgcgacaaa ctcggcggga agcctaccgt gaccgaggcc 240

ggcctggccg acatgaccta cctgaagctc gtcgtcaagg agaccctgag gctgcacccg 300

gcgctgccat tgctcgttcc aagggagtgc aacgagacgt gcaagatcat ggggtacgac 360

gtgcccaaag gcttcgtcgt gttcgtgaat gcatgggcga tcggc 405

<210> 2322
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316097g06b1

<400> 2322

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ggagattgtt cttgatgatc tagagcccaa ggttttcaag gcaatgcttc atttcatcta 120

cagagatacc ctcgttgatg attatgagtt ggatgcatca ggctccatgg gctctatttt 180

tgatactttg gcggcaaagt tgttggccgc agcagacaag tatgacttag gaaggttaag 240

attgctatgt gaatcttact tgtgcaaagg catttctgtg gcctcggttg caagtactct 300

tgcattggct gatagtcacc atgccatgga gcttaaagcc gtttgcctaa aatttgctgc 360

agaaaatctt tcagctgtga tccggactga cgggttcgat tgcctcaagg ataattgccc 420

atcacttcag tcggagatac tgagaactgt tgctgggtgt ga 462

<210> 2323
<211> 353
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316097g09b1

<400> 2323

ttttagagag ccacccagcc atgagatggt atgcatcggt aggctgaggg cgctggtgct 60

tcgtgcggcg gcgggcgcgg gcgcgggcag gcgccggtgg tccaaggtcc tatncagtcg 120

ggcggttgat gtgggcggga gaccccgtcc gcgcggacac cattggcata aattcctggc 180

ggtggctggc gccaggacaa atatgatgct cgattcatcc gactctgact ccggcgctcc 240

tgctgggcag ctgcagctgc agcgccgcgc ggttgctgct gggacccatc cgcaggatgg 300

agggtacgcc agtgcggggt ggcagaggga agatggtaaa ctgaaatgtg ggt 353

<210> 2324
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316097g12b1

<400> 2324

tttctttgac gcgtgggcct tcctgttgac catgtcctgg gccagcgcct ccatcacata 60

ctggatggtc aagttccggc caggattcag ctacttcgcc ttcttcgccc tcaacctcta 120

tggtggcgtc tccgtcatcg agagcctcat gatgatcatc tcctcccttg tgcccaactt 180

cctcatgggg ctcatccttg gcgccggcgt cattgggatc atgatgctga cgtctggatt 240

cttccggctc cttccggaac ttcccaagat tttctggaaa tacccagtgt cctacattgt 300

ctacggctct tggggtttga agggtgcata caagaacgac ctgctcgggc tggagttcga 360

gccgatgacg ccgggaggcg agaagctgac cggcgagttc atcatcacca acatgatggg 420

gctgagcgtc agctact 437

<210> 2325
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316097h05b1

<400> 2325

tttttgcctc gtcgcggaac agtgctgcca ccgccggcgc catgagtaag ttgcagagcg 60

acgccctgag ggaggcaatc acaaacatta tcaatgactg ccgtgagaag aaccgcaagt 120

tcgttgaaac cattgagctg cagattggtc tgaagaacta ttacccgcaa aaggacaagc 180

gtttcagtgg ttctgtcaag cttcctcaca tccctcgccc aaagatgagg gtttgcatgc 240

ttggtgatgc ccagcacgtt gaagaggcag ggaaaatggg cctagactgc atggatgtgg 300

aatcccttaa gaagatgaac aaaaacaaga agctggtcaa gaagcttgca aagaagtatc 360

atgctttcct tgca 374

<210> 2326
<211> 304
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316097h08b1

<400> 2326

taagcacaag gagcacctcg gcgagatggg cgccgccgcc gccggagcct tcgccctcta 60

cgagaagcac gaggcgaaga aggacccgga gcacgcgcac aatcacaaga tcgaggagga 120

ggtggccgcc gctgcagccg tcggcgccgg cggcttcntc ttccactagc accactagaa 180

gaagcaggac cacaaggagg ccaaggaggc cagcggcgag aagaagcacc accacttcgg 240

ctagatcacc gttgacgtgc ggtggccggc ctcgccgccg gccgtgcgtg tgcttacgtt 300

acgt 304

<210> 2327
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316098a05b1

<400> 2327

cttactcgtc cggaaaataa tgcagagaag gctacggcgg cagatggtca agctaaaaag 60

ccagaagatc cttatgcaga gaaggctagg gcgatagagg ttatgtttcc ttcaacagag 120

aaggttggga agattggaga tgtaaatcct gttaaagatt ttgaagccat gctggcagag 180

agatctagct caatatgggt tcagaaggca attgaagaga tgaagaagta cacgaccaat 240

ttggtagaga attctcttca aggagattat tacgaaaagg cactcaagtg ttttgttgct 300

ctgcggaagg cctgtataat cgaacaggag ccggaggaat ataaccaatt tgtgacgaag 360

ctttatgaga gact 374

<210> 2328
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098a11b1

<400> 2328

tgttcattga accactgaag ctcctattta aggatgaggt tcggaagctg ggaagtatcc 60

taaatgtccc agagtcattc ttaaagcgac acccatttcc tgggcctggt cttgctgtac 120

gtgtcatagg tgatgttaca gcaggcaatg ctctggaggt tcttcgtcag gtggatgaga 180

tatttattca agccattaaa gatgcaggcc tctatgatga aatttggcaa gcttttgctg 240

tgtttttgcc tgtccagaca gttggggtcc agggtgacca gagaactcac tcccatgtgg 300

ttgctctaag ggcaattact agtgaggatg gcatgactgc aaattggtat gattttgagc 360

gcccgttcct g 371

<210> 2329
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098b08b1

<400> 2329

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agatcgatga cgaccagaag ctgcggaacc tttatgacaa gagaatctcc caggaggtag 120

ttggtgatct tctgggtgag gaattcaagg gttatatctt caagatcatg ggtggctgcg 180

ataagcaggg cttccccatg aagcaagggg tgctaacttc tgggcgtgtc cgccttctgc 240

ttcacagggg cacaccttgc ttccgtgggt ttggcaggcg taatggtgag cgcaggcgaa 300

agtccgtccg tggttgcatt gtcagccaag acctgtctgt tatcaacttg gtgattgtca 360

agaagggtga gaatgatctg ccaggcctta ctgacactg 399

<210> 2330
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098b10b1

<400> 2330

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cgctgtggtt ccccggcgcg caggcgcccg agtacctcga cgggacgctc gtcggcgact 120

acggcttcga ccccttcggc cttgggaagc ccgcggagta cctgcagtac gacgtggact 180

ccctggacca gaacctggcc cagaacctgg cgggcgagat catcggcacc cggttcgagg 240

acgccgacgt caagtccacc ccgttccagc cctacgccga ggtgttcggc ctccagaggt 300

tccgcgagtg cgagctcatc cacggtcgct gggccatgc 339

<210> 2331
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098c07b1

<400> 2331

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ctgcttgggc tcagcactgc ccggtgaatg aattgccact tatcttccag ttggtcacag 120

tactttcgtc acttcagatg cccaattatc cttcacttga ttacaatact tgaataactt 180

cagatgcttc gacatagtag ttatgatttt atcgtagaat ggagacttct attatggagg 240

agtcattgaa caaatgttgt attttggttg ccaacctatg ctatatttgt gcttatgatg 300

cgttcttgaa tt 312

<210> 2332
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098e01b1

<400> 2332

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tcacaactct tgagattggc gaatggtttt taactgagga cttgtacgtt gtgcttcgct 120

tcctccagct ttcaccgagg ctagaagaac tcactttgat gcataggccg cttgatgaag 180

gagcggaaat agattgcatg ccaattgacg ggatgacctt ccggtgtcca ctccttgaaa 240

gtgttgtcat acaatgttca gagggtgatg gaggaatcga taagctgcta agtgttctgg 300

tagtcaatgg gattagtcta gacaatataa atattgcctt ctatgatgaa attgaaaagc 360

gggaccgtgc ggagaggata cgtgccgacg aggaacggtc gaaggagctg cgcatcttcg 420

agaagagggt gaagagaaat ccagaatgga gagagtatga tcctta 466

<210> 2333
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316098g04b1

<400> 2333

cctccaccat gctcctgctt gtcgactgca tcgccacacg aagttcacag gccatagcta 60

cggacggacg aaattccaac tgtactgcaa cccctcagga tccacagtgg ccaaagatgg 120

cgatccacag ttgttcggtg taatgcctaa ggagaaaaca atgtctctct cacttttgtt 180

tttcgaaaga cctacctatc atcttgccgc tgctgcgtta gagtggctcc atctgcagat 240

gggggaggtc tcgaccagca gctgggagaa gtctcgacct gcacctggtc acgcgtgcca 300

ctgccactta ggtccaccac ctacagctgg cgccgcagtg cctcaaccat tcaactatgc 360

cacctcagca gttcaatata tattggagaa gaagaaaaaa caacagt 407

<210> 2334
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316098g07b1

<400> 2334

tttagagccg cgacgtgggc aagggcttcc gctgcgtacg catggtgaac aacatctacc 60

tcaacttcga cgccttccac ggcgacaagg cccacggcgg cgtccacgac ggcaccgagg 120

tcgtgctctg gaagtggtgc gagggcgaca accagcgctg gaagatcctc ccctggtaga 180

tgagatgcca ggagagcttt cgcattgcca tcgacacatc gccatggatt agtccgggga 240

caagcccccc cgccccgagt cgtcgtccgt ccgtccatcg tcgtcgtagt agtcctctgc 300

cgctggtagc gaataatgtt gctgtgtcca aataaaaccg tgtgcgatgt gtggcaatgg 360

tgtctgtgtg cgtccgtcgt gtgtcgcctt gtgattgaat gattgagccg gcgt 414

<210> 2335
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098g12b1

<400> 2335

gttaaagatt acgcacccga attgctctgg gaaaggctaa aagaatggat gtcgtcgcag 60

gagaaacagc tggtgtggaa gggcagctat tgctactata tcctgttctt tttgtattac 120

aggggtttga agcatatgtc ggagtgttgc ttcttcagac cgcgtggcac gggctcacct 180

ctgaatggca ggtcatagtg tgcgggatct tgctggtggt gatggcggtt ggcaacttcg 240

tcaacacggt ggagactctg gccctgaagc tgaggttcaa agcaaagatg aagaggacga 300

ggcccaggca ggagcctggc cagagccgtg cgaatcgcct gcatcaaaat tgacaatcca 360

gtctggtgtc acccctccat gcctggaatg gagacatcaa cactgacaaa accatc 416

<210> 2336
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316098h07b1

<400> 2336

tcggtcgaat tcacccgtct gcaccgctca gtcccccgga ccggaccgcc ggacctgttc 60

ttgccttgcc atggcagcag cagcactgag ggcgcacctg aacgatcata tcgccagcat 120

gtacaccgat ggtgtgggcg acgaggacac gttcgaggag ctgcgggacg agggcaccg 179

<210> 2337
<211> 312

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099c05b1

<400> 2337

ttgaatagga atagaggtcg tgattggtgt aacgggctac aacgaagacc tgagacctga 60

gaagaagttt gcaaagaagg caaggagcgc aggacctgag acctgagaag tttgcaaaga 120

aggcaaggag cgcaggaggc tagatatctg tggagctgaa tgttggaaca acgaagtaac 180

caacgagtgg cttcataact catttcaatt gcagtatgcg tgcttctctt ccatcatctt 240

ttaagcatgg actaaccgtg gtttgtagca cattgagttt ttgcaacacc gatagacatg 300

aaccactccc tc 312

<210> 2338
<211> 210
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099c12a1

<400> 2338

gttgggggg gcaaagatgt ttctcattaa ttacccaaat acataggcga cagattggac 60

ttataatatt atgtgcatgg gcatatacat agccatgggt aggatttaca tacgagcatg 120

ctttctagag ttatgttggg aacatggaca tacacatatt cttattttag gaacaaacaa 180

gaaagattaa tggaaaagga aaacccaaag 210

<210> 2339
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099c12b1

<400> 2339

tcttccacgc gtccggcaag ctatatacct acatagtaca gccatggccc ccaccgtgat 60

ggcctcgtcg gccacctccg tcgctccttt ccaggggctc aagtccaccg ccggcctccc 120

cgtcagccgc cgctccaacg gcgctagcct cggcagcgtc agcaacggtg gaaggatcag 180

gtgcatgcag gtgtggccca tcgagggcat taagaagttc gagaccctgt cctacctgcc 240

accgctcagc acggaggccc tcctcaagca ggtcgactac ctgatccgct ccaagtgggt 300

gccttgcctc gagttcagca aggttgggtt tatcttccgc gagcacaacg catcccctgg 360

gtactacgat 370

<210> 2340
<211> 169
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099e10a1

<400> 2340

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tcccttgttt gtacattcat ttacactcta caacaggatg tcccaaagaa taatggtatc 120

tacacctagc aaaccagata acgttattga tgcggtgatt ctatagctc 169

<210> 2341
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099f03b1

<400> 2341

ttcatcacgt actcgcatcc atcacactag cttgcttagc atcgccacct gctcttagaa 60

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tcgatggcgg caggacgatg tactccaaca ccaccgacga ctgctacgac gccggcaagc 180

acgggcacgg gcacgggcat ggccatggcc atggcggggc aaacatgtac gctaacacca 240

ctgacgtgga gtgcttcgag gactccggca ggcacggcta cggtcggtgg tggcaggacc 300

atgtactcca acaccgtcga cgaggagtgc ttcgactccg g 341

<210> 2342
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316099g04b1

<400> 2342

tattttaaaa aaaaaaaaaa aaaaaaaaaa aaaataaaaa aataaaaaaa aaaacacaaa 60

aaaacaaaaa aaaaaaaaag ggggggccgt cctagaggat cc 102

<210> 2343
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316100b08b1

<400> 2343

cacttaggca cagccgccgc cgccgcggct cccaggacag cagccaagga agaggaagcc 60

aagcctccgc catgccgaaa tccaagcgca atcgctcagt caccttgtcc aagaccaaga 120

agaagcctgg tctagagcgt aagggcaagg tggtcacgga gatcaaagac gcgattgagc 180

gccacagcag cgcctatgtc ttcaccttca acaatatgag gaatcagaag ctcaaggacc 240

tcagggacca acttaaatcc tctagccgga tattccttgc tggaaagaag gtcatgcaga 300

tagcattggg gcggtcacct gctgatgaag ctaagacagg cctgcataaa ctctccaagt 360

tccttcaagg tgcttctgga ttgttattta caaatctccc agggatgatg ttgagagatt 420

a 421

<210> 2344
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316100c10b1

<400> 2344

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gaactcactt cccttgctac tcctggtcaa gttgaccaaa cccaactgga acgtgctaaa 120

gcatttgcaa aatcagctat cttgaagaac ctggaatcaa aggcatcaac aactgaagac 180

atggggcgcc aagcattggc atttggtgaa aggaaacctg tggagcagct tcttaaggct 240

gttgatgcta taactctggc agatgtatca actgttgctg agaagatcat ctcgtcacca 300

ttgacaatgg catctcatgg aaatgttctc aatgtaccag cctacgagac agtgcgtggc 360

aagttcagct cgaaatgagg aggcttctga acaagttaac tgttcatatt taattttctc 420

caagacctgg tcacattttt cacaagaaaa ataagatgca tacaatttt 469

<210> 2345
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100d02b1

<400> 2345

aatttcactg catgggttgg tctccgctgg attgtgacca actctttgtg tgtggcctgt 60

cccggttctt tgtggttctt tgcgcctgct cggtcctccc aagacatcag ataaattctt 120

gtgaatctga tcagcatcat cttatcgctg atgtagcatc tgtagtctag atatttgaaa 180

gagtatgtga tcgaaggcat tacctcatca ccccatagcc cctctgtata gtgtcttgtt 240

agaggaatat gtggaatcgt gttcgttggt tgatcaagca cagctgcagg tcaaataaat 300

cttaagctgc caattcttat tttcc 325

<210> 2346
<211> 375
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316100d05b1

<400> 2346

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cccggtgccc gtcctgcggg aacgagatgg cgaccgagac ccagtacgtg ccgccgccgg 120

cgccggccct gccggagcag agcgccgcca cggcgaagac ggggtacgtg cagggctccg 180

tgacgtacac ggtgacggac gacctggccg tgacgcccat gtcggcatct cagcatcncg 240

cggctcggcg ccctcgccgc cgtcgggggc ctcgccgcgc tccaggagaa gaccgtggag 300

ctcgggtaca gggagggcct ggagatcctc aaggcctcgc tgcggtccaa gactgtcctc 360

acggacgtct tcctc 375

<210> 2347
<211> 343
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100d10b1

<400> 2347

cccacgcgtc cgcccacgcg tccggggaga tgcccagcca gcaaaggtga gcgtgaggat 60

cccttcatgg acatccacag ctgacgcaat ggcaactctg aatggcaaaa aactcaacct 120

gacatctgca ggtgatttcc tcacgttgac aaaactctgg ggcgatgata ccttagtgct 180

ccaatttccc attaacttga gaaccgaggc aatcaaagat gaccggccgg agtatgcgtc 240

catccaggcg gtgctgatcg ggccgcacct cctcgccggc ctgacacacg gcaacaaggg 300

ccattaacgc gaccgagcac tccaacgacg gcctgacccc ggg 343

<210> 2348
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100e07b1

<400> 2348

aaaaaaaaaa aaaaaaaaaa aaaaaagaaa aaaaaataaa aaaaaaataa taaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaata gg 102

<210> 2349
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100e10b1

<400> 2349

gttatcagcc tcctcctctt ccctcgccgc ccgccgcccg ccgaggttgg tcgccggacg 60

ccatggcccc caccaagaag tcgaagaaga gcacggagaa catcaacaac aagctgcagc 120

tggtgatgaa gagcggcaag tacacgctcg gctacaagac cgtcctcaag acgctccgga 180

gctccaaggg gaagttgatt atcctcgcaa acaactgccc tccgctcagg aagtctgaga 240

tcgagtacta tgctatgctg tccaagatca gcgttcatca tttccatgga aacaatgtgg 300

atcttggaac tgcgtgtggc aagtactacc gggtgtgctg tttgagcata cttgaccctg 360

gtgactcgga catcatcacc accgttcctc agtgaagaca agcttaccta tcctagccta 420

agatgatgt 429

<210> 2350
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100g05b1

<400> 2350

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acctcgctgt caccgccagc atcatgccgc gtcccgtgga aggttagctg catgcatgcg 120

gcgcgggtgc atgtgccaga ggaagatgga tctggagagt cacgaattgg attaaaactg 180

gcatgcctta tagtatatac cctaaataac aagggcatgc gttgtgtcga gtgttatatt 240

gtgtctttgt gttgatcatg gatttccccg gttatgtgaa catgttttac tttactcagt 300

atagaagcat ttgagggttg gagctgttat gtgagactct atttcgtgag caacttctcg 360

aagggtttat ctatgcatga ccttatcttg gttt 394

<210> 2351
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100h03b1

<400> 2351

gagaatagaa aatacacaaa agatagacca cgattgccgg catcgagccc gacgaggcgt 60

cggaggtgcg acaaagatga ggaagaagct gggcacccgg ttccccgcgg cacggatcaa 120

aaagataatg caagcagatg aggatgttgg caaaattgca ctggctgtgc ctgttttagt 180

ttcgagagcc attgaattgt ttctgcaaga tttgatcgac cactcataca aaattactct 240

tcaaagtggt gcaaagacac tgaattcctt ccacctaaag caatgtgtga agaggtacag 300

ctcttttgac ttcctaactg agattg 326

<210> 2352
<211> 462
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316100h10b1

<400> 2352

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gataaattag ggagagaggc ttatgataag gtagatgtca taggtatcga tgaagcccag 120

ttcttcgatg atcttcatga tttttgcagc aaagctgctg atcatgatgg aaaaatcatt 180

gtggttgcag ggctagatgg tgattacaaa aggaacaagt ttggctcagt tctggacatc 240

attcccctgg ccaactcggt caccaagctg acagcacggt gtgagttgtg cgatcgccgg 300

gcgtccttca cattgaggaa gacacaggaa accaggactg aactcattgg tggagccgat 360

gtgtatatgc ctgtgtgcag gcagcactac ctggacgggc agattgtcat cgaggccaca 420

cggattgtca tggatattga aagatccacg gaagtagctc gc 462

<210> 2353
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316102b07b2

<400> 2353

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caagcacaac aacaacaaca acaacaacaa atccttcaac aaattctgca acaacaactg 120

attccatgca gggatgttgt cttgcaacaa cacaacataa cgcatgcaag ctcacaagta 180

ttgcaacaaa gtagttacca acagttgcaa caattatgtt gtcagcaact gtttcagatc 240

cccgagcagt cgcggtgcca agccatccac aatgtcgatc atgctattat tctgcatcat 300

cattaacaac aacaacaaca ac 322

<210> 2354
<211> 322
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316102c11b2

<400> 2354

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ggggcctggc cggcagctcc atctccggcc gcaagctcgc cgtccggccc gcctccgccg 120

ccgtctcccg ctccacgcgc agggctcgcg gggcggcggt ggtggccaag tacggggaga 180

agagcgtcta cttcgacctg gacgacatcg ccaacacgac ggggcagtgg gacctgtacg 240

gcagcgacgc ggcgtcgccc tacaacggcc tgcagagcaa gttcttcaac accttcgccg 300

tgcccttcac caagcggggg ct 322

<210> 2355
<211> 375
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316102e02b2

<400> 2355

tgctgnnagt gcagcagacc agttctacac ttccaacgca cgcaagaaaa tcctccaggt 60

tcatctacag cataggaagc ggggagatgg aagggagcag cagccggacg ccagagataa 120

ccatcgtccc ggcgcctagg ccggcggcgg gcggtggcgg tggcggtggc gccgtggacg 180

cggtgaaggc ggcgagcaag gagcccatca gcccgggctc gccttccccg gccagcaagg 240

tgcgccccgg cgccgtctcc ctgcccgggt ggaagctcga ctccctctgc aaggagtcca 300

gctcgccgcc ggccatgatg gcgcgcttcc cctatttctg aagccacgcg ggcatccttg 360

tcatcctttg ctagt 375

<210> 2356
<211> 356
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316102f03b2

<400> 2356

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tggtggtgaa gttaagctgg ctgcaagtct tgctcgacca cgtcgggaaa tacaactgga 120

caagaagagt gctaaaggtg gggtcaaggt caatagtgac gcaacttcta aagacaccaa 180

caattctatt aagaaaaaga accagaatag ggaggtcgaa gtgaagaagg attcaccaca 240

taaattgcga aaaggtgatg tgagcaagct gacctcacat gttgatgcga aagtaccaca 300

atcatccaac ccatcgaaag gcaaacggaa agctggaaag actgaaaata ccgctg 356

<210> 2357
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316102g07b2

<400> 2357

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ctcgacaagt tccaggagct cctcccgagc gccttcgaag cacggaagca cgctgctggc 120

gccggcccgc gcccgctgca gaggctggga acttcttgcc agttttgaag gtagcagtac 180

gtacccaaag gta 193

<210> 2358
<211> 236
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316102h07b2

<400> 2358

tcggtggaga agctgataac atcaaagatg atacttgctg ggtcgaaccg gagacttcat 60

tccgtgcacc gaaactctgg cttggctgtg gctgggttag cagcagacgg taggcagata 120

gtctcaagag caaagtcaga agcagccaat tatgaaaagg tatacggaga acccatgcct 180

gtaaaggaat tagctgatcg tgttgctagc tatgttcatc tgtgtacact ctactg 236

<210> 2359
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316102h11b2

<400> 2359

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ttgatgtgga cattggagcc aatccctctg ctgagggtgg tggtgatgat gagggtgtcg 120

atgaccaggc cgtgaaggag gttgacattg ttgacacctt ccgtcttcag gagcaacctg 180

cttttgacaa gaagcagctt atctctcaca tgaagcgcta catcaagaac ctctctgcca 240

agcttgaagg ggatgaccta gatgttttca ag 272

<210> 2360
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105a10b1

<400> 2360

gtttgtttca cattgtgtgg tttcctatat gatgatgcga ttggttgatt gattctgcct 60

gggttggttg gttggctggt gttgtatact gtcctctggt tatacaggtc tgctcaaagt 120

gtagcgtgac tgagtcgagc ggtaagaatt gaattgcgat gggaggaact ctgtttttgt 180

cgagtcggag aaggcggtgc gggtgcgcgc cttgtaggtt ataggaagtt gaggtcggtc 240

ggtcgagtca aaatttgtat tggctggttg cagtggggtc t 281

<210> 2361
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105c09b1

<400> 2361

gttatttctt cgctgaacag tgctttgatc tgctggaaaa atgctcccaa cctaccagca 60

aagaactttc atgcattgac aaggttggat gaaaatagag ccaagtgtca gctagcgtta 120

aaagctggtg tgttttatga caaaatatca aatatgacta tttggggaaa ccattcaaca 180

actcaggttc ctgatttctt gaatgccaaa attaatggga ggccagtaaa agaagtcatc 240

aaagatacaa agtggctaga agaggatttc actataactg ttcaaaagcg tggaggtgtg 300

ctcatccaaa agtggggctg atcttcagct 330

<210> 2362
<211> 284

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105d06b1

<400> 2362

gatatgttga acttcttgag gaatgcaaca taaatatccc ttcatggttt tccttcaact 60

caaaagatgg agttaatgtt gtgagtggag actcattaat cgaatgtgct aaaattgcta 120

atgaatgtgc aaaggttggt gcagttggca taaactgcac acctccaaga tttattcata 180

gcttgatact ctccattcgg aaggtcacag acaagccaat tctgatatac cccaacagtg 240

gagaaagata cgatgctgag aaaaaggagt gggtggaatc cact 284

<210> 2363
<211> 313
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105e04b1

<400> 2363

cgttttgttt gggagattcc tgatgtgcag cctggatgca tcattcagat gagattgcaa 60

gttcctgaga acaaacggcg agagtctaca ttgaaaggga ttgtgatagc aaggcgcaat 120

gctgggataa atacaacctt cagattgcgt agattagtag ctggtgtggg agtcgagtcc 180

gtctttccac tttactcacc aaacatcaaa gaaatgaaga tcttggacag gaagaaagtc 240

aggagagcta agctgtatta cctgagagac aggatgaatg cacttaaaaa atgaggcttt 300

cggctaggat ttt 313

<210> 2364
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105e07b1

<400> 2364

ctccaactcg caccccgctg ggggcctcca cctccgcctc cgcctgcgct gctgctgctc 60

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ggcgctgcgg tgggaggatg tggaggtggg cgagcccggg gacggcgaga tccggatccg 180

gaacaccgcc atcggcgtca acttcatcga cgtctacttc cgcaagggcg tctaccccgc 240

tcccccttccc ttcacccccg gcatggaagc tgttggcgtg gtgactgccg tggggcccgg 300

<210> 2365
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105e10b1

<400> 2365

ggaaagagga ggtgggcaac gtgccgacgc ggcggatcgg gtccgcggcg ggcgccatag 60

ccagcacggc cacgttcccg ctggaggtgg cgcggaagca gatgcaggtg ggcgccgtgg 120

gcgggaggca ggtgtacaag aacgtgctgc acgccatgta ctgcatcctc gagaaggagg 180

gcaccgccgg gctctaccgc gggctcggcc ccagctgcat caagctcatg cccgccgccg 240

gcatctccta catgtgctac gaggcctgca agaagatact tgtcgacgag aaagaagacg 300

gcggcgccgt cgagccccag gaggagacgg agaccggaca ggcaggagga caggcg 356

<210> 2366
<211> 243
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105f06b1

<400> 2366

ccatgctgct gctcaggagg cgtacgacga ggacgacgag atgcctggag gcggtgccca 60

aagagtgcag tgcgcacaac agtaagctag ggttgggcaa gctttttggg gacccaagat 120

caagatgcct gcctgctctc tggggttttg gtggtgttat cgatgaagct gatttttgcc 180

cgtttggcgc cggggctgta tccatccatg tcttttgaaa aatgctacgt ggctactctt 240

aat 243

<210> 2367
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316105f10b1

<400> 2367

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tatgcttcat ttggtccttc caagcaaagt tgatccactg gtcaatctta tgaaagttga 120

taaggtccca gattctacat atgatatgat tggaggtctt gatcagcaaa tcaaggagat 180

caaagaggtc atcgagcttc ctatcaaaca tcctgagtta tttgagagcc ttggaattgc 240

ccagccaaag ggtgttctcc tttatggacc accagggaca ggcaaaacat tactggcacg 300

tgcagttgct catcacac 318

<210> 2368
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316109d03b1

<400> 2368

gaaggggttg ccggatcttg gcctggagct gtgggattat ctgatcggga aaggatgtgt 60

acctcatagg catgcattgg atgttctggt taccggttta tgctgcagag atgtggttgg 120

tgaagcatat aggtgcttcc gggagctggt tgagatggga atggcaccta cagagcgtgc 180

attcagggtt ttggaagggt tcttgaagaa gaagcgggag tttgggaaga ttgacgagat 240

taggcaaatg atgaaggcta tccaattgga ggagcatcaa gctgaagaag aagctgcgtg 300

aagctatcaa ccctcctgtg ggccctttg aaaagaaaca tatttatttc ttggaccatg 360

taaaatttcc aagcctgcgt ggtttaagca aag 393

<210> 2369
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316109g11b1

<400> 2369

tggtaatctc tgggatctct ttgttccaag caggggaact attcaggact agcttggtat 60

gtcgccggcc aaatcgaccg cacactgagc tggaaggtaa accaagaaga agaaaaatgt 120

cttacttgaa cttgacaact aactccattc gtgtatgaaa tttgttctag ttgccgtggc 180

tctgaactga agatgtagcc ttgtggtgca ggatgtgaag tggctgcagt ccattaccac 240

gatgccgatc ctggtgaaag gagtgatcac cgcagaggac a 281

<210> 2370
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316109h02b1

<400> 2370

attaacaagt ctgccccaag gatgcccgat gtgatcattc ctgaggatct ggttgacaac 60

attgcgctat ctacacgtca tgagatcaac agagcctttg caaaccgtca ttcagattgc 120

tcttggccgt gacataaaga aggtccttat ggtgattgct ggtctatggc tgctttccat 180

tctcggcagt tgctgcaact tcttgacgct gatctacatt gtttttgtgg ttctgcacac 240

agttccagta atctacgaga agtctgaaga tcagattgat acctatggtg 290

<210> 2371
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316109h04b1

<400> 2371

ctctttcttg cggcactcac actacactca tccacgcaca agctaatcta gcggcgtggc 60

tcacttcagt ccagtcggca tggcggctcc caggggcgcg gcactggtgc tggcgatggt 120

gctcgcggcg atgctggtgg cgccgccggc gacggtgcac gccatatcct gctccacggt 180

gtacagcacg ctgatgccgt gcctgcagta cgtgcagcag ggcgggtcgc cggcccgggg 240

ctgctgcacc ggcatccaga acctgctggc cgaggccaac aacagccccg accgccgcac 300

catctgcggc tgcctgaaga acgtcgccaa cggcgcctcc ggcgggccct acatcacccg 360

cgccgccgcg ctcccctgca agtgcaacgt cgccctcccc tacaagatca gccccagcga 420

cgactgcaac tcgatccact gaacgaactg 450

<210> 2372
<211> 290

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110a01b1

<400> 2372

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tacatgacct acatgttcaa gtatgacact gtccacggtc agtggaagca ccatgaagtt 180

aaggtgaagg actccaagac ccttctcttt ggtgagaagg aggttgcggt gtttggctgc 240

aggaacccat aggagatccc atgggctgct gctggtgctg agtacgttgt 290

<210> 2373
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110b02b1

<400> 2373

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aacgagatca tggacacgac cgacaagaat ctcatcggca agctcgtccc cgccatgcag 180

atgctcaagg atgcgctcgt cacggctggc tacaacgaaa ttcgtgtttc cacgccaagc 240

tcactcagca tcctggtaga ctcccagctg ccgtccgcgg ctcggtttcg cgacgtctgg 300

gatgacgcca tcttcacgcc gatgctccaa tttctccggc agaccaagtc gccactcatc 360

gtgaacatgt ac 372

<210> 2374
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110b04b1

<400> 2374

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ctatgagcag aggaaggcca gcctcgtcga aaggctcaac gccctcaaca actctgccgg 120

tgccgccgat gatgacgagg aggacgacga gtgaagagcg ttcttgtcca ccccagtgta 180

gtattgcaac gtgcgttttt gttgaagtct ggcaccctgc ccaacgggcc tgttcctttg 240

agttttggtt atgtcgcttg agttatagat tgtgttatct ggattatgtg ccgtgctggc 300

atttggatct taatcttaat cctttagtct ggcacccttt ctttattttt tgtggctgtt 360

ccatgctggt tggccttagg ttgacatgac cttcgttgag gtcttttcag cttattacta 420

accatacta 429

<210> 2375
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110c08b1

<400> 2375

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ggccaggcgg tcggcgggcg cattccagtc ggtgtcgagc agggcccggc agacgtcggt 180

cagcgagtcg tcgtggatgt aggtgcggtc gcgcagttcg agcgagcgcg gttcgcagtc 240

gagccgcatc acggcctcgc gcgccagccg ctccggcgcg atgtagagat gcaggaagtg 300

caccgtgtcg ttcatgcacc agcgcgaata gtgctcggcc ggcagcacgc agaatttgcc 360

ggcgc 365

<210> 2376
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110f07b1

<400> 2376

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cctcctccgc aacatcaccg gcaacccaga agtcagggtc aacaagatgg ggagggcagc 120

aggagtgctt gagaaccatg aggagggcag gcgctacgcc gagcacggtc tcagagccta 180

tgtgcaggac aagacccccg agatcatgcc aggaatcaac aagttcttca ccagcccgaa 240

atgaagcact ttagtctctc tgtgactcgc tattagcaac tgttgtggtc aagtgcaaac 300

ctatttcaag cattcagtaa tgttgtcgcg tccataattc agaggatatc ataaagtacc 360

tcttattgaa agaaccatgt gatgtttgat ggcttgctat atatgtgatg gttga 415

<210> 2377
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110g02b1

<400> 2377

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ctcctgcccg cttcgtcgcc gctgctcccc ttcgcctccc ggctggcctc ctccacgccg 180

ctgcgcgccc agccgctgcg cttctcgctc tcccccgtcc ccaagagcat ctcctcctcc 240

tcgacctccc acatccccgt gcgctccctc ttcaccggga tcgtcgagga ggtcggccgc 300

gtgcgccgca tcggcccgcc gcccacgcct tctgggggcg ggggagacgc ggctcccggt 360

gtcgacctcg aggtcgagac caagaacctc ctcgccggga cgcagctggg cgacagca 418

<210> 2378
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110g06b1

<400> 2378

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aaaagaatgt tttgcttctt gcctcttcat ttgctacgac ttgattcgtg cggatgttgc 120

tcttgagctt gcatggacga ataacatgct ggattttgcg ttcccctatc tattacagtt 180

catccgtgag tacacaagca aggtggatga tttggtgaag gacagaatag aatcgcagaa 240

ggaagaaaaa gctaaagaga acgaagagaa ggaactagtt gcgcagcaga acatgtacgc 300

tcaattgctt cctctggcct tgcctgctcc gcccggcatg atgggcggtc cacctccgat 360

gggtggaatg ggcatgccgc cgatgggcgg gatgggtttg cctccgatgg gtcct 415

<210> 2379
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110g09b1

<400> 2379

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ccactctggt tagtcaccag gaatctcttg aagccaaggt caacgagaca aaagctacag 120

tcaagttcca gctaaagaag gttctttgca tgggtgttgc tgtgggcaac ttgtcgatgg 180

acgagaagca gatccaacaa aacatccaaa tgagtgtcaa cttccttgtg tccctcctga 240

agaagaattg gcagaatgtg aggtgcctgt acgtgaagag caccatgggg aagcgtgtac 300

gggtgttcta agtgtgtgcg ctccagtgaa gttgataaga taccgggctt tcctgccgac 360

ccctgcttgt ctttggatta gatctgtttc actgatacca attttgtgtt tgcctaagcg 420

aatatcaaca agtatttaat cgtactagtc ttatc 455

<210> 2380
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316110g12b1

<400> 2380

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gcacccagca gttgaggggc gcttctttgg ctctcttcgc ttggcttggc aaggtcacac 120

tggagactta tatttcccag atccacattt ggctcaggtc tagtgtacca aatgggcagc 180

ccaaatggct tctgtctttc ataccgggct acccgatgct taacttcatg ctaacgacat 240

caatctatct tttgctatca taccgggtat ttgagatcac aaacgtgctg agggcagcct 300

tcattcccag cagagacaac aaccgcctgt accagaattt cgttgcgggg gttgccatct 360

ccgtatgtct gtattgctgc tcgctcgttc ttctaaaaat tccggctg 408

<210> 2381
<211> 174

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316111c08b1

<400> 2381

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caatgtgtct cccaacccca acagcagttg cagcagcaac tcgggcaaca acctcaacaa 120

caacaaatgg cacatggtac ctttttgcag ccacaccaga tagctcagct tgag 174

<210> 2382
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316111e10b1

<400> 2382

aaggacacaa agggggaggc tgcagaggga gggggggatg aaaaacatgc aacctcacca 60

actcacagac aaggagccga ccaagcagca gctgcagatg atgatgacga tgacgatgtg 120

gagtggcaga ctgacacgtc agcggaagcc gcgagaaaac gcatggagga gcagctgagc 180

gcagcaactg ctgaaaaggc aatgcttgcc accgaggaga cggagaagaa gaagaaacag 240

gccctgcaca aagagggcag ccccaaaggg acaccaaagg ctgaagataa tcccaatggc 300

aaccagactg ggcccaagac 320

<210> 2383
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316111g02b1

<400> 2383

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ccggcggttt gcgcggcgcg gcggcgggga gcggcggcag accggccgtg cggcggcagg 120

ccatcgggct ccgtcaaggt tgctaaaatg gataagctca agggctctgc gcgtcttatg 180

attgtttcag atctcgatca cacaatggtt gatcatcatg acgaagagaa cttgtctttg 240

c 241

<210> 2384
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316111h02b1

<400> 2384

gtcgctcaac atcctcatca agggggggt cgttgagtcc ctgggggggg cgcccttctt 60

cgccacgtac ggaggtgtgc tgttcaagta catctagaag actcgtcgag cggacttaga 120

atctacggac accatcacga ataactctgc cccgcccgcc cgccgttcgt atgttgtgcg 180

ctgctgttat ttttggttct tgtgtcatta ttccaggatt gccgcagttt acccccactt 240

tccctttggc cttttgggtg tgt 263

<210> 2385
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114a01b1

<400> 2385

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gggaaccgtg aagtggttca acgtcaccaa ggggttcggc ttcatctccc cggaggacgg 120

cagcgaggac ctcttcgtcc accagtccgc catcaagtcc gacggctacc gcagcctcaa 180

cgagaacgac accgtcgagt tcgaggtcat caccggcgac gacggtcgca ccaaggcctc 240

cgacgtcacc gcaccaggag gaggagcgc 269

<210> 2386
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114b12b1

<400> 2386

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ggtgacggcg gggttccatg tgtcgggcgg gcacctcaac ccggcggtga cggtggcgct 180

gctggcgcgc gggcacatca cggcgttcag ggcggtgctg tacgtggcgg cccagctgct 240

ggcctgctcc ctcgcctgca tactcctccg ctacctctcc ggcggccagg ccactccggt 300

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cctcaccttc tccct 375

<210> 2387
<211> 427
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316114c03b1

<400> 2387

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ttgattgaga ggacatctgg tgaatacttg gtgaagaatg gtgtccgcac cttcgcttgc 120

agtgaaacag ttaagtttgg ccatgtcaca tttttctgga atggaaaccg ttcgggatac 180

tttgacgaga ccagggaaga gtatgtagaa attcccagtg acagtggtat cacattcaat 240

gagcagccca aaatgaaggc acttgaaatt gctgagagaa ctcgggatgc tatcctcagt 300

gggaagtttg accaggtgcg tattaacctg ccaaacggtg acatgngttg gtcacactgg 360

tgatattgaa gccacagttg ttgcttgcaa ggctgctgat gaagctgtca agatggtctt 420

ggatgct 427

<210> 2388
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114c05b1

<400> 2388

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taccagtgct gccacaagat gtcctgatgt ctatatttgc acacctggag atccctgacc 120

tgatgcgtgc cagcttcgtc tgctcctcgt ggcgctccgc gtattccagc ctgcgcaacc 180

ttgagcagta ccagcaacgc cagacgccgt gcctcttata cacatctgaa tctgctggtg 240

aaagcgttgc gtgcctctac agcctcttgg agaagagggt catacaagtt gactctcccg 300

gagccacc 308

<210> 2389
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114c12b1

<400> 2389

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agcgtgagaa tagagaaatg gtttcaagag caactcttct atctgagttg gctgcgaaag 120

gtgtgatttc atgtgcttcc caagaagtaa aagatctata caaccttatg gagcatgagt 180

tccttcctct ggatctagca tcaaaagtgc agcctctgct atccaagatt tctacgattg 240

gaggaaagct ttccgctgca tcgtcagttc cggaaattcg tttatcacag taccaaactg 300

cattggagaa gcttactgca ctgagggtgc tgcagcaggc atctcatatt ttccagtcca 360

tgaaaattga tatgctatct agaatgatcc attctttga gttcattgtc gtcgagaaga 420

tcgctgttga tgc 433

<210> 2390
<211> 337
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316114d01b1

<400> 2390

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ttgcagacac tttacagcat agaaggctgg gatgcatatg ccctggcttt ccaagcagtg 120

gatgagcagg cgagcattga gtttaggaac cctggcatgg aggacgaccc gacctgcggg 180

cctatccttg acaacgtggc catcaagaag ctcttctccc ccgacaaagc aaaggagaac 240

atgngtgatc aatggagact ttgaggaggg gccaatggat gtttccaaac acaagctttn 300

cgtgtcctgc tcccgacgaa ccttgacgag cagacat 337

<210> 2391
<211> 244
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316114e01b1

<400> 2391

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catgaccggc ctgtcgcagg gcgtgcgtct cccaggcccg gccggcaggc gcgccagcag 120

gttcatcgtg agggcgtcgt cggcggaggc ggaggccgcc ggccgccgcg cggtccttgg 180

cctcatggcc cagcggagtc gtcggagncg cgttcgctca ggtggtgcac gccggcaccg 240

tcgc 244

<210> 2392
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114g03b1

<400> 2392

tcattcccag atcccccaag agctccctct cccccaccca cgaagcgcct cccatcccga 60

tggcccgcac gaagcagacg gcgaggaagt ccaccggcgg caaggcgccg cggaagcagc 120

tggcgaccaa ggcggcgcgc aagtccgccc cggccaccgg cggcgtgaag aagccccacc 180

gcttccgccc cggcaccgtc gcgctccgcg agatccgcaa gtaccagaag agcaccgagc 240

tgctcatccg caagctgccc ttccagcgcc tggtgcgggg agatcgcgca ggacttcaag 300

accgacct 308

<210> 2393
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114g08b1

<400> 2393

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ccggaagctg gcggtgaacc tgatcccctt cccgcgtctc cacttcttca tggtcgggtt 120

cgcgccgctg acctcacgcg gctcccagat gtaccgctcc ctcacggtcc cggagctgac 180

ccagcagatg tgggactcca agaacatgat gtgcgccgcc gacccccggc acggccggta 240

cctgacggcc tcggccatgt tccgcggcaa gatgagcac 279

<210> 2394
<211> 60
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316114h10b1

<400> 2394

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<210> 2395
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116b02b1

<400> 2395

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cagtgcccca acgccggctg ccacaggtac gtgacctacc accaggccga ggagcaccgg 180

agcgcctgcg cgcacgcgcc ctgccgctgc acggagcacg gatgcggcta actcggcgcg 240

gcttcggacc tcgccgacca cctcagcgcc gaccactgcg tgccggtgcg ccccatccac 300

ta 302

<210> 2396
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116b07b1

<400> 2396

ttcattgtac ggcacaacca agcccgtcat acaggcctac aagcccgcac actacctctg 60

gaggacctag cccagattac agcccgacat ctccaaacta cagccccagc gcaagctact 120

ccccgactgc accgggctac tccccgtcct acaccggccc gaagacaact gacaaggacg 180

atgagactgt tgactagaaa atggctgctg ttggttggct tgatgcagaa cgatgcccca 240

cgaccaactc ttgtttcctc gagtgtccgg aacaggcgtg ttgatgtaag ctgtgatgct 300

aatagcagca ctagaatctg cggccgtagc tgggctgata tttaa 345

<210> 2397
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116b11b1

<400> 2397

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gcaagaggaa gaaggacgcc gctgccgctg gcaagcccaa gcgcccgccc tccgcctttt 120

tcgtcttcat gtctgagttc aggcagcagt acaacgcgga gaaccccaac aacaagagtg 180

tcgccaacgt gagcaaggcg gcgggtgaga agtggagagc tatgtctgat gaggagaaag 240

caccttatgt ggaaaaggct gaacagaaga agaaggatta tgagaagacc aaagccacct 300

ttgataacaa ggagagtgcg agctccaaga aggccaagac tcagaacgat gaggaggtca 360

aatctgaggt cgaagatgag ggtagcgatg aggaaaatga ggacgatgac gagtaaatag 420

tgtatcagat catgaggtag caaattgggt gt 452

<210> 2398
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116e10b1

<400> 2398

ttaatataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaata aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaggg cggacgtttt gggggggcc 89

<210> 2399

<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116f03b1

<400> 2399

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cgactgctac tcgtacgacc atcctttcca ccaggagctg tacaactatg tgaagcagca 120

agctctgagg aaccaggaca gcgtcggccc cgcgaagcaa gggtcgatgc atgtgagggt 180

gccgacgccg gacctggagg aggccaagat catggagacg atccagtcgg agctccacag 240

cctcaaggca ggcgacggca tttcccgctc cttcagcagg atcacgatcg aaggtccatg 300

atgaccttgt ttcctgctca tatcgaagat cgtcatggat atgatccatg atgatcggag 360

tggctcga 368

<210> 2400
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116f04b1

<400> 2400

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gaagctgatc tcagtagaca cattctacgg acaagtcgct gctgaagctg tgaaaagagg 120

agccaccatg attaatgatg tgtctggcgg acagcttgac ccaagtattc ttgaagttgt 180

agctgaactt ggagttccat atgttaccat gcacatgaga ggtgatccat caactatgca 240

gagtgaacag aatttacagt atgatgatgt ctgcaaagaa gttgcttctg aattatatgc 300

acggttaaga gaagctgagt tgtctggaat tcctttgtgg aggatagttc ttgatcccgg 360

cattgggttt tcgaagaaat ccaaacataa tcttgaaata atcaacggct tgggatccat 420

tagaaaagag atgggtaaag tgagtttagg tgctttacat gtgccaa 467

<210> 2401
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116g03b1

<400> 2401

ggttggctag gcagcgcctg tgctaccgaa gggtttggag tgggctgggt ttgtgatgaa 60

ctcgagaatg ctgtggaagg aggcagaggg caagcctgat tgggtgaagg atcttgatgc 120

tgtgggggag aatggggagg a 141

<210> 2402
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116g05b1

<400> 2402

ccgtctcctt tctcctttcc ccaacccaaa ccaggagcgc cctccctccc ccagccgccc 60

gccccctccc cacccaggaa accagccatg aaggggggcca aatccaaggg cgccgtcaag 120

gccgacacca agttggcggt gaagagcaag ggggcggaga agccggccgt caaggggaag 180

aagggcaagg ccggcaagga ccccaacaag cccaagaggg cgccctccgc cttcttcgtc 240

ttcatgggcg agttccgcga ggagttcaag cagaagaacc ccaagaacaa gtccgtcgcc 300

gccgtcggca aagcggccgg tgagaggtgg aagagcttga gcgaatcgga gaaggccccc 360

ta 362

<210> 2403
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116h08b1

<400> 2403

ggtgggttgc ctcgactacc tcggcaaccc cagcctggtt catgcgcaga gcatcctcgc 60

catctgggcc tgccaggtcg cgctcatggg cgccgtcgag ggctaccgcg tcgccggcgg 120

gccgctcggc gagatccgcg acccgctcta ccccggcggc agcttcgacc ccctgggcct 180

cgctgacgac cccgaggcgt tcgcggagct caaggtgaag gagatcaaga acggccgcct 240

cgccatgttc tccatgttcg gcttcttcgt gcaggccatc gtcaccggca agggccctct 300

cgagaacctc gccgaccacc ttgccgaccc cgtcaacaac aacgcctggg cctttgccac 360

caacttcgtg ccc 373

<210> 2404
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316116h11b1

<400> 2404

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ctttcttctt cctcttccta cctctgcctc ttgctcttcc ttcttcgcaa gcagcagcct 120

cttcgccctc gcagccagcc gctgtcgata ggggggaggt cgtcaccgcc ggctgctctc 180

tgccacgccg cttcgaccag agacaggtga gatggaaggt ttcgagttct tccagatcgt 240

acttgacaac tcctcgagca ggctgaggct gcctgacaag tttaccatg 289

<210> 2405
<211> 211
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117a01b1

<400> 2405

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caatctaacg gctgtagagg atcgttcctg cctggctctc atgcctgaca gggtggccca 180

gaggttgtct gacagactac aaaacttttt a 211

<210> 2406
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117b12b1

<400> 2406

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gtcggtgagg ctccagctgt tcgcgctcgt caccgccaac gacatcgcgc agcgccgcga 120

cgggaccgtc aaccgcttcc tcttctcctt cggcgaccgg cagtcgcccg cgaggccgcg 180

cccggacgcg cacggcgttc gctccgccga cgtcaccgtc gacgcctccc ggaacctctg 240

ggcgcgcgtc tactcccccg cagcggaggc gaccccactc cccgtcctcg tctacttcca 300

cggcggcggc ttcacgctgc tctccgcggc ctccacgccc atcgacggca tgtgccgccg 360

cttctgccgc gagctgggcg ccgtggtc 388

<210> 2407
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117e07b1

<400> 2407

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aaagggcgag caagacagtg cccagtgaaa caagctacag ttgttagcat ttgcatggag 180

atggatgctt cctctctgag tactctttta ctcgacgctc ttcctgcggt gttctgttgt 240

tttgacgcag gattttcatc gtcgtgttgc cagccatgat ggaaatctct cggttccaag 300

agcatccaag ttttcgcttc atgacaaata aatgccactt tttcaatact ctgtttttt 359

<210> 2408
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117f11b1

<400> 2408

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aactgatgat agatcaggat gcagagattg atgttgaaac atgtgagaag aactcatcat 120

tcagtgattt tgaggactca gcagatgaga tcatctactt gcctgctatt ccttccccgg 180

atgctcctga tgagcagcca gacaagtgcc tagtaagctc atcaaaattg gaggatagca 240

atcattctgg ttcgccccca tcctcaatgg atgctgtgca gaatggtcta gccattcctc 300

ccgcatctag tccattggaa gttgttgaca attccatggc cgaagagcca tcagcggaag 360

cggcaaacgc aaagcggaag aggaggctat cagccaaggg gctggagatg cagcaggctg 420

aaaaagtgaa gaaaccaccc ataaa 445

<210> 2409
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117g05b1

<400> 2409

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catgaggctg gactgaagct acaggccatc atgtcactcc accagtgcgg tggcaacgtc 180

ggcgacgtcg tcaacatccc gatcccgcag tgggtgcggg acgtcggtgc gagtgatccg 240

gacattttct acaccgacca gcacgggact aggaacattg agtacctcac ccttggagtt 300

gatgaccagc ctctcttcca tggaagatcc gccgtgcaga tgtatgccga ttacatggca 360

agcttcaggg acaacatgaa agagttcttg gatgccggtg ttattgtaga cattgaagtc 420

ggactt 426

<210> 2410
<211> 283
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117g08b1

<400> 2410

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gcaggcggag ctgctccgcg ccgttctgga agagcagaag ctcgctgcgc agggagacga 180

gcccgtagtt gaggatgatg atgatgagga agatgaggat gatgatgacg aggatgacaa 240

agatgatgat gttgagggag ttgatgcaag tggaagatct aag 283

<210> 2411

<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316117h01b1

<400> 2411

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atcatgtccc tcctcggtga atacctatgc atcaggcgag agctaaaaga tattccagta 180

aggcttcgtg caagtgttta atctcagagg ctaaaggagt ctaggtggtt tccaactgtt 240

gttacccccc aggagatgct tgttaatatc tgtccttagg aatacaagag acctgcgatg 300

catgctatct tctgtgatta caaccaata 329

<210> 2412
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316119b05b1

<400> 2412

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caagctcctc gccggcgcca aggcgtaccc cctgcccccg gccggcggct cctacgcgcg 180

ggccccgatg atcgcgccgg gctccgccgc cttcttgggc gggcgctggc cggcgcgggt 240

ggccacggcg gcgctcttca gggtcaacgc gggcataggg ctcctcctga tgctcgccgt 300

catg 304

<210> 2413
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316119c09b1

<400> 2413

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cgtccaaccc cgtgtacaag aaggtgcccg tcctcattca caacggcagg cccgtctgcg 120

agtcgctgct catcctggag tacctcgacg acgccgtcgg ccttgccggc aacggcaagc 180

ccatcctccc cgcagacccc tacagccgcg ccgtcgctcg cttctgggcc gcctatgtga 240

acgacaagct gttcccttcg tgcaccggga tcctcaagac tacgaagcat gaggagagag 300

ccggtaagat ggaggagacc ctgtccgggc tcagacactt agaagctgtc atggcggagt 360

gc 362

<210> 2414
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316119d06b1

<400> 2414

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ggcttcagcg ggctcggcgt cgcgctcacc ggcatcgccg gacgcgcgat tgccggcgcg 120

atcgcgggcg atacgcgcgc gttcgacctg ttcgcgcgcc tgcgtcaccg gcgcttcccc 180

ggcggcgacg catggcggca acccgcgctc gaactcggga tgctgtacca ccgtgtacgc 240

gagctgttct gagccccctc tctccgttct ccagaccatg cagacat 287

<210> 2415
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316119e03b1

<400> 2415

ggcagcctgc ctgtgcctct tcctgcttgc cgccgcgccg accctcgctc tcgcccgcgc 60

ggcgcccgcc gccgactcga tacacaagtt actgcggtcg cacggcctcc ccggcgggct 120

gctcccgcgc agcgtcgagt cgtacaccct ggacgagggg aacggcctgc tcgaggcgcg 180

gctgtcggcg ccgtgctacg cgacgtacga caacggcgac ctggctttct tcgacaccgt 240

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<210> 2416

<211> 218
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<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316119e06b1

<400> 2416

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aagagctgct cgctcaagtt caagacctcg ctcaagaggc tgttcgagga gctgctgatg 180

gagttcacgg tgaagggagc ggactgcagc aagttcct 218

<210> 2417
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316119g10b1

<400> 2417

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atgactatgc agatattatg ttgcatgaag aacgacctaa ctttggtggc ataagcatag 120

aagaactgca ccggctagtc tatgctcaag ttttgtgttc tcattcttta acttggcata 180

ttgcaccgac ttatctgtgc tggtgtctga accaaggcct atggctgctg gagattctac 240

ttctcaagca acccatacaa gata 264

<210> 2418
<211> 301
<212> DNA
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<223> Clone ID: uC-tsfl9316120a11b1

<400> 2418

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ggcccggccg cccgcgggca tggggtcatc cgacagcgac tcgagcgggg tgctgaacga 180

cacggacgcg accggcgcca cgccaacaga ggaggcgccg gctccggaga tggggacgct 240

gctcggcggg cccggggcgg ccggcgcggc ggcggcgggg cacgggcagg tgttcctgca 300

c 301

<210> 2419
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316120c04b1

<400> 2419

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ctgttgagct gacaccaagc ttgtttacat ctactgctga taatgcatac caatcaatac 180

atgagttctc aaagcccttg atcaacatga tgaaagctgc aggttgggat 230

<210> 2420
<211> 374
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316120f04b1

<400> 2420

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gtcctcccgc tggccctccc tgcagagggc cagctccgcg gcagccggag atggcgccgg 180

ctcgtcagaa gcgccgggcg acagctcgct cgacgcagac ctcctcagga gggtctccgg 240

ggtagaggac gcggaccgag cgttggacat tatcgcggag tcgctgggag gcggggctgg 300

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tgaccggggc aacg 374

<210> 2421
<211> 98
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316120f05b1

<400> 2421

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caggaggaca ccttctcgga tcgtgaggat tgggacag 98

<210> 2422
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001a07b1

<400> 2422

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tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gg 392

<210> 2423
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001a09b1

<400> 2423

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tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gctaggtttg ggtttgggtt 420

aactgctcta ataggagagt cagctacttg gataaaaaga gtgatccaaa tgaataagaa 480

aatccaagta ttttacggta ttcatgaggt caaatttgat gcagacatga taatta 536

<210> 2424
<211> 554
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316001a12b1

<400> 2424

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tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctataaggag agtcagctac ttggataaaa agagtgatca aaatgaataa 480

gaaaatccan gtattttacg gtatccatga gttcaaattg atgcagacat gataataaaa 540

gatagatcag ggtc 554

<210> 2425
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001b07b1

<400> 2425

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tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggg ttggggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc cacgtatttt acggtatcca tgagttcaaa tttgatgcag acatgataa 539

<210> 2426
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001b09b1

<400> 2426

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gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc 300

ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc 360

gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga gagcgaattg 420

acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac aagccccaat 480

gccaaggacg ttgccaacat gacgcccgag gagcg 515

<210> 2427
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001b12b1

<400> 2427

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tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aag 543

<210> 2428
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c08b1

<400> 2428

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca cgtattttac ggtatccatg agttcaaatt tgatgcagac atgataat 538

<210> 2429
<211> 591
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001c10b1

<400> 2429

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attttaaatc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaaa ttgatgcaga catgataatt 540

aaagattaga ttcaggttca aatggatagg gaatggtatc agatcatgac a 591

<210> 2430
<211> 612
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316001c11b1

<400> 2430

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat tngatgcaga catgataatt 540

aaagattaga ttcaggttca naatgatagg gaatggtatc agatcatgac agtgtggcga 600

gtagagcaat ct 612

<210> 2431
<211> 634

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316001c12b1

<400> 2431

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ctaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt ngatgcagac atgataatta 540

aagattagat tcaggttcaa attgataggg aatggtatca gatcatgaca gtggggcgag 600

tagagcaatc taagcttggt cacgtttttt tttt 634

<210> 2432
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001d08b1

<400> 2432

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tgcacatgag ttgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcg 525

<210> 2433
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001d09b1

<400> 2433

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gttgacaaag aaatgctgct gctgctattc aacgagatcg attctaacct caaagcgccc 120

agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat ccggcgactt 240

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cgtgctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg agagcgaatt 420

gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga caagccccaa 480

tgccaaggac gttgccaaca tgacgcccga gga 513

<210> 2434
<211> 533
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001d11b1

<400> 2434

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agatcctcgt actcgacgtt gctccccttc cgctagacac ggtggtcgtc aacctggaga 420

gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa 480

gccccaatgc caaggacgtt gccaacatga cgcccgagga gcgtctagcc acg 533

<210> 2435
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e07b1

<400> 2435

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caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

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caagccccaa tgccaaggac gttgccaaca tga 513

<210> 2436
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e08b1

<400> 2436

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

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tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttg 416

<210> 2437
<211> 343
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316001e09b1

<400> 2437

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cagcagctaa acccatgcaa ggtattcctc cagcagcaat gcagccctgt ggcaatgcca 120

caaagtcttg ctaggtcgca aatgttgcag cagagcagtt gccatgtgat gcaacaacaa 180

tgttgccagc agttgccgca natcccccag caatcccgct atgaggcaat ccgtgctatc 240

atctactcca tcatcctgca agaacaacaa caggttcagg gttccatcca aactcctcag 300

cagcaacccc aacagttggg ccaatgtgtt tcccaccccc aac 343

<210> 2438
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001e11b1

<400> 2438

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tgcacatgag tagacaaaga aatgctgctg ctggtattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagc 298

<210> 2439
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001f08b1

<400> 2439

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatttctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcgga 369

<210> 2440
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001f09b1

<400> 2440

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggttttgggt 420

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atgaataaga aaatccaagt tttta 505

<210> 2441
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001f10b1

<400> 2441

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caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

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<223> Clone ID: uC-tsfl9316001f11b1

<400> 2442

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caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgccgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg ctttagagct 300

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<212> DNA
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<223> Clone ID: uC-tsfl9316001g08b1

<400> 2443

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atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

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<223> Clone ID: uC-tsfl9316001g09b1

<400> 2444

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aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

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<400> 2445

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ctcaaagcgc ccatatccca atgacgagct cgtcgacgat gtccaccacg ttgcagtcgc 180

gccatgggcc ccgaatgcga accccgtgac atggactggt ccgatgagcc ggtactgcga 240

tccggcgact tgtgccattc aaccatacag ttatggccct cctcgtggga gcttcaaaga 300

tttggcgcga ccctgcaaca ggtggccccc tggaagctgt gcagccacag ccgcagctgg 360

attgagatcc tcgttctcga cgttgctacc cttacgctag acacggtgtt cgtcaacctg 420

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<210> 2446
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316001g11b1

<400> 2446

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caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

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<210> 2447
<211> 525

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001g12b1

<400> 2447

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aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

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aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcg 525

<210> 2448
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h07b1

<400> 2448

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

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<210> 2449
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<212> DNA
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<223> Clone ID: uC-tsf19316001h08b1

<400> 2449

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

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taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

ataaagatta gattcacgtt caaattgata ggggatggta tcagatcatg a 591

<210> 2450
<211> 593
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h09b1

<400> 2450

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tctttacaaa ccccaaaacc tttactagac tttgtctgct tctttagctt acttcaccta 180

gagccttcta ccttttctta tcatggaatc aacccctttt ttttttgtt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactctctgt gtcggtacga acctaacact ttctaccaag cttaatcggt 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atcccagtat tttacggtat tcatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg gtcaaaatga tagggaatgg tatcagatca tga 593

<210> 2451
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h10b1

<400> 2451

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caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

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atgccccaat gccaaggacg ttgccaacat gacgcccgag ga 522

<210> 2452
<211> 645
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h11b1

<400> 2452

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agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

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taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcacattgat agggaatggt attagatcat gacagtgtgg 600

tcgagtagag caatctaagc atcgttcagg ttttttttt tttaa 645

<210> 2453
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316001h12b1

<400> 2453

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aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aggccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacg 535

<210> 2454
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008a02b1

<400> 2454

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caaagcgccc agatcccaat gacgagctcg tggacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

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caagccccaa tgccaggacg ttgccaacat gacgcccgag gagc 524

<210> 2455
<211> 589
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008a03b1

<400> 2455

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ggttcctgtt tttaacattt taaagccaag ggcttttgcc catctccaat agctaacaag 120

aactctttct tttctttaca aatcccaaaa cctttactag actttttctg cttctttagc 180

ttacttcacc tagagtcttc tacctttttct tatcattgaa tcaaccccctt ttttttttttc 240

ttttaaaacac atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa 300

tgcgaactag aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca 360

agcttaatcg gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaagt 420

ctaggtttgg gtttgggtta actgctctaa taaggagagt cagctacttg gattaaaaag 480

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tgcagacatg ataattaaag attagattca ggttcacatt gatagggaa 589

<210> 2456
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008a07b1

<400> 2456

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agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc catgggcccc 180

gaatgcgaac cccgtcgaca tggcctggtc cgatgtgccg gtactgcgat ccggcgactt 240

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tgccaaggac gttgccaaca tgacgcccga ggagcgtcta gccacg 526

<210> 2457
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008a09b1

<400> 2457

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catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

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<210> 2458
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008a11b1

<400> 2458

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agatccaaaa gacgagctcg gcgacgatgt ccaccacgtt gcagacgcgc catgggtctc 180

gaatgcgaac cccagcgaca tggcctggtt cgttgtgccg gtactgcgat ccggcgactt 240

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<210> 2459
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008a12b1

<400> 2459

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tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

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ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat 600

gaca 604

<210> 2460
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b01b1

<400> 2460

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tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

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gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acatgcccca atgccaggac gttgccacat gac 513

<210> 2461
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b03b1

<400> 2461

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tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

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acaagcccca atgccaagga cgttgccaac atgacgcccg aggagcgtc 529

<210> 2462
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008b05b1

<400> 2462

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aaccgaactg ccatctccgg tacttgggcg atcaaccata cagtgatggc cctcttacgg 180

ggacctaaaa agatttggcg ctaccctgga acaagtggac agttgaaagt tgtgcaacca 240

cagtctaagc tgggaattag atcctcgttc tcaacgttgg tactgttaca aagacacggt 300

gttccacaaa ctggagagtg aattgactaa acttttggaa gtggcgaggt 350

<210> 2463
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008b06b1

<400> 2463

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tgagcattca aagaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgacgt 300

gaccctgcaa caggtggccc ctttgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgtcctc gaccgttgct tccccttccg ttagacacgg tgttcgtcaa cctggagagc 420

gaattgacaa aacggttgga gagcggtgag ggcacttttt acaaggacca tccgacaagc 480

cccaatgcca aggacgttgc cacatgacgc ccgagga 517

<210> 2464
<211> 561

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b08b1

<400> 2464

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atgacgagct agtcgacgat gtccaccacg ttgcagtcgc gccatgggcc ccgaatgcga 180

accccgtcga catggcctgg tccgttgtgc cggtactgcg atccggcgac ttgtcccatt 240

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aggtggcccc ttagaagctg ttcagtcaca gccgtagtgg gattgagatc ctcgacctcg 360

acgctgctcc tcttgcgcta gacacagtgt tcgtgaacct ggagagcgaa tcgacaaaac 420

ggctggagag cggctagggc acctttttaca agggccatcc gacaagcccc aatgccaagg 480

acgttgccaa catgacgccc gaggagcggc tagccacggc gctcatggca gttctcagca 540

ccctcaagat tgtccattcc g 561

<210> 2465
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b09b1

<400> 2465

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attgcatttg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgacgcccg aggagcgtct agccacg 537

<210> 2466
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b10b1

<400> 2466

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tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccattcg 480

acaagcccca atgccaagga cgttgccaac atgacgcccg aggagcggtt agccacg 537

<210> 2467
<211> 567
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008b12b1

<400> 2467

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tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

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ctcagggcag ctctcagcac cctcaag 567

<210> 2468
<211> 578
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c02b1

<400> 2468

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggcttgggtt 420

cgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ctacggtatc catgagttca aatttgatgc agacattgat 540

aaataaagat tagattcagg ctcaaactga tagggaat 578

<210> 2469
<211> 575
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c03b1

<400> 2469

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ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggttcggg 420

cttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga 540

taattaaaga ttagattcag gctcaaattg atagg 575

<210> 2470
<211> 595
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c04b1

<400> 2470

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaacgat tagattcagg ttcaaattga tagggaatgg tatcagatca tgaca 595

<210> 2471
<211> 561
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c05b1

<400> 2471

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tttttaacat tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt 120

cttttcttta caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt 420

gggtttgggt taactgctct aaaaggagag tcagctactt ggattaaaaa gagtgatcaa 480

aatgaataag aaaatccacg tattttacgg tatccatgag ttcaaatttg atgcagacat 540

gataattaaa gattagattc a 561

<210> 2472
<211> 612
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316008c07b1

<400> 2472

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attttaaagt tcaagggctt ttgcccatct ccaatagcta acaagaactc tttcttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtanttt acggtatcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attcaggttc aaattgatag ggaatggtat cagatcatga cagtgtggtc 600

gagtagagca at 612

<210> 2473
<211> 529
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316008c08b1

<400> 2473

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tgagcagaca aagaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacangccc 480

caatgccaag gacgttgcca acatgacgcc cgaggagcgt ctagccacg 529

<210> 2474
<211> 596
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c09b1

<400> 2474

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ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caacccctttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt cacatttgat gcagacatga 540

taattaaaga ttagattcac gttcaaattg atagggaatg gtatcagaac atgaca 596

<210> 2475
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008c10b1

<400> 2475

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attgcacttg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

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attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

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acaagcccca atgccaagga cgttgccaac atgacg 516

<210> 2476
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008c11b1

<400> 2476

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gtgagagtca cgcgtatcaa caaggagaac agtggagagg tatgatggta gatacaacca 120

tacttgccct atgacgatgc aagggcaaag gaaaagcctt atattgatag caagggtatt 180

tatgttatta gaagacatgt gaaggttaac cttgtccgca agcactgttc tggagctaat 240

gacttgggaa gcgaggatat gcctggtgca actagccatg gtatgagggt tcaagcatac 300

ctataagatg gttactgaca agatatcggg acaaccgagg caatctataa agcaacagtg 360

ggaattacca aaaaaccaat acctgatacc aggttctatg accgctctgc tccgatttac 420

acacaatcta gagacttgcc tccttaaagg ttatagatgc 460

<210> 2477
<211> 596
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008c12b1

<400> 2477

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ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga 540

taattaaaga ttagattcag gttcaaattg atagggaatg gtatcagatc atgaca 596

<210> 2478
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008d01b1

<400> 2478

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cctccatcgt gaaggggctg ccatttaaca ggtactcatg gctggtgacc cataattcat 240

tctccatcgt cggcgagccg tcacgcaccg gggttgagag ggtcacattc tacaaccagg 300

aagacactgt caccaaccaa ctcaggaatg gagtgagggg attgatgctg gatatgtatg 360

acttcggcgg ggatgcctgg ctctgccact ccttgcaagg gcaatgctac aacttcactg 420

ctttcgaacc agcaattgac acgttgaaag aggtggaagc atttctatcc cagaatccca 480

cggag 485

<210> 2479
<211> 602
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008d03b1

<400> 2479

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tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

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ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattcaggc tcaaaatgat agggaatggt atcagatcat 600

ga 602

<210> 2480
<211> 564
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008d04b1

<400> 2480

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attgcacttg agcagtcaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gttgacgatg tccaccacgt tgcagtcgcg 180

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ctcatggcag ctctcagcac cctc 564

<210> 2481
<211> 581
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008d05b1

<400> 2481

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tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aaccccttttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaggat tagattcagg ttcaaattga tagggaatgg t 581

<210> 2482
<211> 591
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008d08b1

<400> 2482

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taaagtcaag ggcttttgcc catctccaat agctaacaag aactctttct tttctttaca 120

aattccaaaa cctttactag acttttttctg cttctttagc ttacttcacc tagagtcttc 180

tacctttttct tatcattgaa tcaacccctt tttttattta ttttaaacac atcccaaccc 240

aaagtataag cgcccaccta gtgctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaattg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agcgatcaaa atgaataaga 480

aaatccaagt attttacggt atgcatgagt tcaaagttga tgcagacatg attattaacg 540

attagattca ggttcaaatt gatagggaat ggtatcagat catgacagtg t 591

<210> 2483
<211> 567
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316008d09b1

<400> 2483

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa ttccaaaacc tttactagac tttttctggt tctttagctt acttcaccta 180

gagtgttcta cctttttctta tcattgaatc aacccctttt ttttttactt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt gctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtggttacga acctaacact ttctaccaag ncttaattgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcataa 480

tgaataagaa aatccaagta ttttacggta tgcatgagtt caacattgat gcagacatga 540

taattaaaga ttagattcag gttcaaa 567

<210> 2484
<211> 477
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008d10b1

<400> 2484

gtgttctatt acctcttccc gcacctagca aatggtaagc caagaaagcc aactgacggt 60

attgcatttg agcagacaaa gaaatgctgc tgctgttatt caacgagatc gattttaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccattcag ttctcgccct cctcgtaggt gcttcagagc 300

tttgccgtga ccctgcaaca ggtggccccc tcgaagctgc ccagtcacag ccgcagcgga 360

ttgagatcct cgtcctcgac gttgcttccc tgtcgctaga cacggtgttc gttaacctgg 420

agagcgaatt gacaaaaccg ctggagagtc gctagggcac cttttacaag gaccatt 477

<210> 2485
<211> 514
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316008d12b1

<400> 2485

tgttctccga cctcttcccg cacctagcaa atggtaagcc aagaaagcca actgacggta 60

ttgcatatga gcagacaaag aaatgctgct gctgctattc aacgagatcg attctaacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagtggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gtgagggcac cttttacaag gaccatccga 480

cangccccaa tgccaaggac gttgtcaaca tgac 514

<210> 2486
<211> 602

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008e02b1

<400> 2486

gctctcaagc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat 600

ga 602

<210> 2487
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008e03b1

<400> 2487

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gacaaagata tgctgctgct gctattcatc gagatcgatt cttacctcat agcgcccaga 120

ccccaacgac gagctcgtcg acgaggtcca ccacgttgca gttgcgccat gggccccgct 180

tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg gcgacttgtc 240

ccattcgacc atccagttct cgccctccta gtaggagctt aatagctctg ccgggaccct 300

gcaacaggtg gcccccttgga agctgttcag ccacaggctg agcgggattg agatcctcgt 360

cctcgacgtt gctacccttc cgctagacac agagttcgtc aacctggaga gcgaatcgac 420

aaaaccgctg gagagcggcg agggcacctt ttacaag 457

<210> 2488
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008e04b1

<400> 2488

ggaaatttgg cacgactgcc ggtaccggca acggaattcc cgtttcggcc cttgcgtttg 60

aatttttcat gcacacctgc aaaggagctc atgagtaaaa aatgcttata taggagctat 120

attcgctgca agttgaacgg agtgagtttg agaaccacat gggaaggaca catggatcct 180

cacgtttatt gccggtgagc cgaggagtcc atgaccaggg gtgaatttgt tggccgctgt 240

gatttctttg agcgaacaac tgaagcgagc tactgaacta actgggacca tatgagcacc 300

ctggttgctt ttagccaggt tgatg 325

<210> 2489
<211> 610
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008e05b1

<400> 2489

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gacagtgtgg 600

tcgagtagag 610

<210> 2490
<211> 592
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008e06b1

<400> 2490

ctttgttcat ctagcggatt tggatttctt taacaactaa ggttcctgtt tttaacattt 60

taaagctcaa gggcttttgc ccatctccaa tagctaacaa gaactctttc ttttctttac 120

aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac 360

ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctagggttg ggtttgggtt 420

aactgctcta ataaggagag tcagctactt ggattaaaaa gagtgatcaa aatgaataag 480

agaatccaag tattctacgg tattcatgag ttcaaatttg atgcagacat gataattaaa 540

gattagattc aggttcacat tgatagggaa tggtatcaga tcatgacagt gt 592

<210> 2491
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008e07b1

<400> 2491

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taacatttta aagttaaggg cttttgccca tctccaatag ctagcaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttagctgct tctttagctt acttcaccta 180

gaggcttcta ccttttctta tcattgaatc aacccctttt cttttttttt ttaaacacat 240

accaccccac agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct ggtgttacga gcctaacact ttttaccaag cttaatggga 360

ataaggcctt agaaacactc acaagttata tagggcttga aagaaagtct agggtcggga 420

ttgggttaac tgctataata tcgagagtta gctagttg 458

<210> 2492
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f01b1

<400> 2492

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taacatttta aagccaaggg cttttgccca tctccaataa ctaacaagaa ctctttcttt 120

tctttacata ttccataacc tttactagac tttgtccgct caatttagct tacttaacct 180

agagtcttgt acctttttctt atgattgaat caaccccttt ttttttttat tttaaacaca 240

tcccaaccca atgtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccag gcttaattgg 360

aatatgacct cacaaacact cacaagttat atagggctcg aaagaaagtc caagcttggg 420

cttgggctaa ccgctctaat aaggagagtc agctacttgg attaaa 466

<210> 2493
<211> 559
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f03b1

<400> 2493

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctgcaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctggtt ctctagctta 180

cttcacctag aggcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tggttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgac agaaagtcta 420

ggctcgggtt tgggttaact gctctacaaa ggagaggcag ctacttggat taaaacgagt 480

gatcaacatg aatgagaaaa tccaaggatt ttacggtatc catgagctca aatttgatgc 540

acacatgaca attaaagat 559

<210> 2494
<211> 91
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008f04b1

<400> 2494

ttggcacgta tgcaggggcc ggtcacgaat gccggctgtc ggctttgcat ttgagcttta 60

aggcaatgct gcagctgcga ttcaacggct g 91

<210> 2495
<211> 596
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008f06b1

<400> 2495

gctaacactt tgttacatct cgcggatttg gatttcttta acaactaagg gtcctgtttt 60

taacatttta aagctcaagg gcttttgccc atctccaata gctaacaaga actctttctt 120

ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agaggcttct acctttttctt atcattgaat caacccctttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaatacgaa aatccaagta ttttacggca tccatgagtt cacatttgat gcggacatga 540

taattaaaga ttaggatcag gttcaaattg atagggaatg ggtttagatc atgaca 596

<210> 2496
<211> 603
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f07b1

<400> 2496

tcagctaaca ctttgttaca tctacgcgga tttggatttc tttaacaact aaggttcctg 60

tttttaacat tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt 120

cttttcttta caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt 420

gggtttgggt taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca 480

aaatgaataa gacaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca 540

tgataattaa agattagatt caggttcaaa ttgataggga atggtatcag atcatgacag 600

tgt 603

<210> 2497
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f09b1

<400> 2497

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ggctggagta cggccctggg gggtcattgt tgctatgggg aggagaccat gacgatagaa 120

ggagtgtacg gacgtctgag ctggttgggg gaacgactga acggagatgt aagcctggct 180

gagcagaatg acgaacatag gatgttcgtg tagcttggag tggaggagga cttatgatga 240

cgtcgaagcc tagagattgg cact 264

<210> 2498
<211> 187
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f10b1

<400> 2498

atcaatcata acctgatggt ggtgcatagc tgaccgtcaa gagtttgtgt ccgacacact 60

agcgtgtaat gggccttggg cccattggca tctgggagga atgcacggga acgatgagct 120

gaacggccat ctccctactt gggtgatcaa ccatacagtg atggccctct gacggggacc 180

tacgaag 187

<210> 2499
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008f12b1

<400> 2499

gggattgctt taacgactat gctgctgcct ttaacattgg aggccacggc tatcgccctg 60

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gtccgctcac tttggcttac ttaaggtcct gcggtgtccc tgtttttatg agggggagaa 180

cctgtctaat gatgaattga aagcacatcc tacctcgatg ggtagagcaa ccacctcgtg 240

ctatctagtt cgcagagtgc aaacaagaac tgcatgatac acgttctctg ttgatagagg 300

ccttcgctga atacacggct aaattggaaa ttgacctcac atacactcac aagtgattgg 360

gggatcgatg gagagtctag gtttgggttc gtggtaactg atctaataat gagaggtggc 420

ttcttggatt a 431

<210> 2500
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008g02b1

<400> 2500

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggctaact gctctaataa ggagagtcag ctacttggat aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gaatcaggtt caaattgata ggg 583

<210> 2501
<211> 557
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g04b1

<400> 2501

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gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag agcttcgccg 300

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tcctcgacct cgacgttgct ccccttccgc tagacacggt gttcgtcaac ctggagagcg 420

aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat acgacaagcc 480

ccaatgccaa ggacgttgcc aacatgacgc ccgaggagcg tctagccacg gcgctcacgg 540

cagttttcag caccctc 557

<210> 2502
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g05b1

<400> 2502

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaagagt gatcaaaatg 480

aataagaaat ccaagatttt acggtatcca tgagttcaat ttgatgcaga catgataa 538

<210> 2503
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g06b1

<400> 2503

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ctttaacgag agcgatacta actttattgc gcctagacac caacgacgag cttgactaga 120

atgttcacga cgttgcagct tactcatgcg gcccggattg ccaactccct tatacttgga 180

ctgacccgtt gtgccggtac tgtgaaccgg agactagtcc catgtgtcca tgcacatcta 240

gtcctatgtg gtggcgataa agagatctag aacgacatga gacaggtggt ctgctcgtac 300

gtgcctaaca ctatgcgcca aggtgatgag aaattagacc tccacgctgc tcccatgttg 360

tttgacagct gggatcaaag tcccgg 386

<210> 2504
<211> 584
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g07b1

<400> 2504

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ttaaagttca agggcttttg cccatctcca atagctaaca agaactcttt cttttcttta 120

caaatcccaa aacctttact agacttttgc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccacc 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatcg aaatgaataa 480

gagaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataattaa 540

agattagatt caggttcaaa ttgataggga atggtatcag atca 584

<210> 2505
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g08b1

<400> 2505

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attgcacttg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccct tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

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acaagcccaa tgccaggacg ttgccacatg acg 513

<210> 2506
<211> 527
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316008g09b1

<400> 2506

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attgcatatg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc cttccgatag acacggtgtt cgtcaacctg 420

gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatncg 480

acaggcccca atgccaagga cgttgtcaac atgacgcccg aggagcg 527

<210> 2507
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008g12b1

<400> 2507

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tttgcacttg agcagacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

tttgccggga ccctgcaaca ggtggccccc tcgaagctgt tcagccacag gcgtagcggc 360

attgagatcc tcgtactcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg 420

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acaagcccca atgccaagga cgttgccaac atgacg 516

<210> 2508
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008h02b1

<400> 2508

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ttctttacaa atcccaaaac ctttactaga ctttttctgc ttatttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caaccccttt ttttttttt tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag cccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gctcaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagcc taggcttggg 420

tttcgggtaa ctgctccaaa aaggagagtc agctccctgg attaaaaaga 470

<210> 2509
<211> 604
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008h03b1

<400> 2509

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aactctttct tttctttaca aatcccaaaa cctttactag acttttttctg cttctttagc 180

ttacttcacc tagagtcttc tacctttttct tatcattgaa tcaacccctt ttttttttttc 240

ttttaaacac atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa 300

tgcgaactag aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca 360

agcttaatcg gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaagt 420

ctaggcttgg gtttgggtta actgctctaa aaggagagtc agctacttgg attaaaaaga 480

gtgatcaaaa tgaataagaa aatccaagta ttttacggta tccatgagtt cacatttgat 540

gcagacatga taattaaaga ttagattcag gttcaaactg atagggaatg gtatcagatc 600

atga 604

<210> 2510

<211> 600
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008h04b1

<400> 2510

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cttttcttta caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt 420

gggtttgggt taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca 480

aaatgaataa gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca 540

tgataattaa agattagatt caggttcaaa ttgataggga atggtataga tcatgacagt 600

<210> 2511
<211> 495
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316008h05b1

<400> 2511

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tttctttaca aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc 180

tagagtcttc tacctttttct tatcattgaa tcaacccctt ttttttttttc ttttaaacac 240

atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag 300

aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg 360

gaataagacc tcacanacac tcacaagtta tatagggctt gaaagaagtc tagggttggg 420

gttgggttaa ctgctctaat aaggagagtc agctactggg attaaaaaga gtgatcaaaa 480

tgaataagaa aatcc 495

<210> 2512
<211> 595
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316008h06b1

<400> 2512

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ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct tacttcacct 180

agagtcttct acctttttctt atcattgaat caacccctttt ttttttttct tttaaacaca 240

tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat gcgaactaga 300

actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa gcttaatcgg 360

aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc taggtttggg 420

tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga gtgatcaaaa 480

tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat gcagacatga 540

taattaaaga ttagattcag gttcaaattg atagggaatg gtatcagatc atgac 595

<210> 2513
<211> 595
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316008h08b1

<400> 2513

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tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta cctttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaca atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaacgat tagattcagg gtcaaatnga taggggatgg tatcagatca tgaca 595

<210> 2514
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316008h12b1

<400> 2514

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tgcccatctc caatagctaa caagaactct ttctcttctt tacaaacccc aaaacacgat 120

actagacgtt tcctgcttca atagcttaca taacctacag cctcctacct tgtcttatca 180

tcgactcaac ccctttttt ttattgcttg aaccacatcc cagcctaaag tatcagcccc 240

cccttagtcc tatgctagtc cgcaaaatgc taactagaac tacatgagac actctctatg 300

tggttacgaa cctaacacta tctaccaagc ttaatgggaa taagacctct caaacactca 360

catgttattt agggcttgac agaaagtcct tgattgtgat cggcctaact gctctaatag 420

gagagtcgct acttggacta aaaagagcga cctaaatg 458

<210> 2515
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009a08b1

<400> 2515

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ttttctttac aaatcccaaa acctttacta gactttgtct gcttctttag cttacttcac 180

ctagagtctt ctacctttc ttatcattga atcaacccct ttttttttt cttttaaaca 240

catcccaacc caatgtataa tgcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttc 420

gggtttgggt taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca 480

aaatgaa 487

<210> 2516
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009b07b1

<400> 2516

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cggcattgca cttgagctga caaagaaatg ctgctgctgc tattcaacga gatcgattct 120

aacctcaaag cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt 180

cgcgccatgg gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact 240

gcgatccggc gacttgtccc attcgaccat ccagttctcg ccctcctcgt cggcgcttca 300

gagcttcgcc gtgaccctgc aacaggtggc cccttcgaag ctgtccagcc acagccgcag 360

cggcattgag atcctcgtcc tcgacgttgc tccccttccg ctagacacgg tgtttcgtca 420

acctggagag cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc 480

atccgacatg cccaatgcca ggacgttgcc acatga 516

<210> 2517
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009b08b1

<400> 2517

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cttgagctta caaagaaatg ctgctgctgc tattcaacga gatcgattct aacctcaaag 120

cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt cgcgccatgg 180

gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact gcgatccggc 240

gacttgtccc attcgaccat ccagttctcg ccctcctcgt cggcgcttca gagctttgcc 300

gtgaccctgc aacaggtggc cccttcgaag ctgtccagcc acagccgcag cggcatttgg 360

atcctcgttc tcgacgttgc ttccccttcc gcttgacacg gttgttcgtc aacctggaga 420

gcg 423

<210> 2518
<211> 543
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316009b10b1

<400> 2518

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ccagacttaa ttaatgcaat gtcgacatta ctcctcagac tgcccttctc acgaaggatg 180

gaggtagagg cagatcacat cgggctcatg cttcaagcat ctgctggttt tgacccacgc 240

accgctccca aggtctacga gaagctagga caaatcgcgg gcaatcaatc agtactgaaa 300

agctacctct ctactcatcc ttcgagtaag aagcgatcgg agctcttgtc tcgagccaag 360

gtaatggagg aggcgatgca gctatacagg gaagcttgcg ccggccacgg gaccgaaggt 420

ttcctctaag gttgcagttt cgaactctcc tgcgtgcggc gtaagtcgtt tggtggcgga 480

gggtgcctgg cgccgaaaca tgccccttg tgnctgcaca gtgacggcca ataagaagag 540

tgt 543

<210> 2519
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009b11b1

<400> 2519

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acctcaaagc gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc 180

gcgccatggg ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg 240

cgatccggcg acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag 300

agcttcgccg cgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc 360

ggcattgaga tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac 420

ctggagagcg aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat 480

ccgacaagcc cca 493

<210> 2520
<211> 605
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009b12b1

<400> 2520

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ttcctgtttt taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa 120

ctctttcttt tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt 180

acttcaccta gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttcctt 240

ttaaacacat cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg 300

cgaactagaa ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag 360

cttaatcgga ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct 420

aggtttgggt ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag 480

tgatcaaaat gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg 540

cagacatgat aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca 600

tgaca 605

<210> 2521
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009c09b1

<400> 2521

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gctttcaaag aaatgctgct gctgctattc aaggagatcg attttaacct caaagcgccc 120

agaccccaac gacgagcttg tctacgatgt ccaccacgtt gctgtagctc catgggcccc 180

gaatgcgaac ccctgttaca tggcctggcc cgttgtgccg gtactgcgat ccggcgactt 240

gccccattcg accatccagt tctcgccctc ctagtcggtg cttaagagat ctgccgcgac 300

cctgcaacat gtggcccctt cgaagatgct cagccacagc cgcaggggga ttgagatcct 360

ggtcctcgac acatgttccc tttcgctaga cacggagttc gtcaacctgg ttagcgaatt 420

gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccgt caagccccaa 480

tgccaatgac gttggcaaca tg 502

<210> 2522
<211> 528
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009c10b1

<400> 2522

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aacctcaaag cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt 180

cgcgccatgg gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact 240

gcgatccggc gacttgtccc attcgaccat ccagttctcg ccctcctcgt cggcgcttca 300

gagcttcgcc gtgaccctgc aacaggtggc cccttcgaag atgttcagcc acagccgcag 360

cggcattgag atcctcgtcc tcgacgttgc tccccttccg ctagacacgg tgttcgtcaa 420

cctggagagc gaattgacaa aacggctgga gagcggcgag ggcacctttt acaaggacca 480

tccgacaagc cccaatgcca aggacgtttg ccacatgacg cccgagga 528

<210> 2523
<211> 561
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009d11b1

<400> 2523

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catgagctga caaagaaatg ctgctgctgc tattcaacga gatcgattct aacctcaaag 120

cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt cgcgccatgg 180

gccccgaatg cgaaccccgt cgacatggcc tggcccgttg tgccggtact gcgatccggc 240

gacttgtccc attcgaccat ccagttctcg ccctcctcgt cggcgcttca gagcttcgcc 300

gtgaccctgc aacaggtggc cccttcgaag ctgtccagcc acagccgcag cggcattgag 360

atcctcgtcc tcgacgttgc tccccttccg ctagacacgg tgttcgtcaa cctggagagc 420

gaattgacaa aacggctgga gagcggcgag ggcacctttt acaaggacca tccgacaagc 480

cccaatgcca aggacgttgc caacatgacg cccgaggagc gtctagccac ggcgctcatg 540

gcagctctca gcaccctcaa g 561

<210> 2524
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009d12b1

<400> 2524

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tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

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gagagcgaat tgacaaaacg gctggagagc ggcgagggca ccttttacat ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgacgcccg aggag 525

<210> 2525
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009e09b1

<400> 2525

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gtacctttc ttatgattga atcaacccct ctttttttt attttaaaca catcccaacc 240

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agacactatc tctgtctgta cgaacctaac actttctacc aggcttaatt ggaatatgac 360

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<210> 2526
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009e10b1

<400> 2526

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taacctcaaa gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag 180

tcgcgccatg ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac 240

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gcggcattga gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca 420

acctggagag cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc 480

atccgacaag ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtcta 536

<210> 2527
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009f08b1

<400> 2527

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cttttcttta caaatcccaa aacctttact agacttttte tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctagggtc 420

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aaatgaataa gaaa 494

<210> 2528
<211> 540
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009f11b1

<400> 2528

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tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aaccccttt tttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

tcgggttaac tgctctaact aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagata atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

<210> 2529
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009f12b1

<400> 2529

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gaacttgagg acacccagaa atgctgctgg tgatgttcaa cgagatcaat tataacctat 120

ggggctctag cccaccgtca agagttgggc gatgaccacc acggtgaaat ggcccttggg 180

ccccataagg ctaactcgga ggacatgcac tggaacgatg agctgatctg ccatctccgg 240

tacttggcca tacaaccata cagtgatggc cctcctactg ggaccttcaa agatctggcg 300

ctaccctgga acaagctgac cgttgagagt tgtgcaacca cagcctaagc ttggaactgg 360

atcctcgttc acaacgtt 378

<210> 2530
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316009g07b1

<400> 2530

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acggcattgc acttgagcag acaaagaaat gctgctgctg ctattcaacg agatcgattc 120

taacctcaaa gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag 180

tcgcgccatg ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac 240

tgcgatccgg cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc 300

agagcttagc cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca 360

gcggcattga gatcctcgtc ctcgacgttg ctccccttc gctagacacg gcgttcgtca 420

acctggagag cgaactgaca aaacggctgg agagctgcga gggcaccttt tacaaggacc 480

atccgacaag ccccaatgcc aaggacgttg ccaacatgac gcccga 526

<210> 2531
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009g09b1

<400> 2531

tcggtgttgc aaaaaagcag ctgtagatca tagcccttag atcacacaga ccctttatta 60

tccctacaaa caacaacacg tgtactagct tgtctctgct cttttagatt acttcaccta 120

gacgtcttct acctttcctt atgacttgaa tcacccccgt tttttctttt cttgtaaaca 180

catatccaac ccatatttaa taa 203

<210> 2532
<211> 606
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009g12b1

<400> 2532

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gttcctgttt ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga 120

actctttctt ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct 180

tacttcacct agagtcttct acctttttctt atcattgaat caacccctttt ttttttttct 240

tttaaacaca tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat 300

gcgaactaga actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa 360

gcttaatcgg aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc 420

taggtttggg tttgggttaa ctgctctaat aaggagagtc agctacttgg attaaaaaga 480

gtgatcaaaa tgaataagaa aatccaagta ttttacggta tccatgagtt caaatttgat 540

gcagacatga taattaaaga ttagattcag gttcaaattg atagggaatg gcatcagatc 600

atgaca 606

<210> 2533
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h07b1

<400> 2533

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cggcattgca cttgagcaga caaagaaatg ctgctgctgc tattcaacga gatcgattct 120

aacctcaaag cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt 180

cgcgccatgg gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact 240

gcgatccggc gacttgtccc attcgaccat ccagttctcg ccctcctcgt gggcgcttca 300

gagcttcgcc gtgaccctgc aacaggtggc cccttcgaag ctgtccagcc acagccgcag 360

cggcattgag atcctcgtcc tcgacgttgc tccccttacg ctagacacgg tgttcgtcaa 420

cctggagagc gaattgacaa aacggctgga gagcggcgag ggcacctttt acaaggacca 480

ttcgacaagc cccaatgcca aggacgttgc caacatgacg cccgaggagc gtctagccac 540

g 541

<210> 2534
<211> 596
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h08b1

<400> 2534

tcagctcaac actttgttca tctagcggat ttggatttct ttaacaacta aggttcctgt 60

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ttttctttac aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac 180

ctagagtctt ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca 240

catcccaacc caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta 300

gaactacatg agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc 360

ggaataagac ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggttcg 420

ggtttgggtt aactgctcta ataaggagag tcagctactt ggattaaaaa gagtgatcaa 480

aatgaataag aaaatccaag tattttacgg tatccatgag ttcaaatttg atgcagacat 540

gataattaaa gattagattc aggttcacac tgatagggaa tggtatcaga tcatga 596

<210> 2535
<211> 466
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316009h09b1

<400> 2535

ttggggtgga cgagagcgag cacagctact acgcgctgca gtggacgctc ctccacttct 60

tctccccggg ccagcagcag cagtaccgcc tcgtcgtcgt cacggccaag cccaccgccg 120

cgtccgccgt cggcctcgcc ggaccaggtg ccgcggacgt gctgccgttc gttgaggcgg 180

acctgaagcg aagctcgctg cgcgtcatcg acaaggccaa ggagctctgc gcgcaggtga 240

gtgatgctgt ctttgaagtg gcggagggng gatgccagga acgtcctctg cgaggcggga 300

gaaaggcatc acgcacagat gttggttgtg ggcaaccatg gctatggagc aatcaaaagg 360

gctgttcttg gaagtgtgag cgattactgc acccaccacg cgcactgcac cgtgatggtt 420

gtgaagaaac caaagcacaa gcactgagca atgcccagcc ttgact 466

<210> 2536
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h10b1

<400> 2536

gttcagtgtt ctcctacctc ttcccgcacc tagcaaatgg taagccaaga aagccaactg 60

acggcattgc acttgagctg acaaagaaat gctgctgctg ctattcaacg agatcgattc 120

taacctcaaa gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag 180

tcgcgccatg ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac 240

tgcgatccgg cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc 300

agagcttcgc cgcgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca 360

gcggcattga gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca 420

acctggagag cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc 480

atccgacaag ccccaatgcc aaggacgttg ccaacatgac gcccgagga 529

<210> 2537
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h11b1

<400> 2537

tcgcagcaat ggaagctctc gcctcgtcgc cgcgggctct cttcgcccgc accgccagtc 60

cgaccacggc gctggccacg ccagcaagat ggacgccgtc atcgaccagg cgtgtcaagg 120

ccgccgccgc cgccgagccg gccggcgagg ccaagccggc tgcggcagcc gcgtcgccgg 180

cgcccaagaa gatcctcaag aagaagcccg tctactccat gaagaaagga cagatcgtgc 240

gagtcgagaa agagaagtac ctgaacagca tcaattacct gtcagtgggg cacccaccct 300

tctacaaggg gctagactac atatacgaag accgtggcga ggttttggac atcagaatct 360

tcgaagaaac cggagagtat gctctgatcg cgtgggtagg gattccaaca ccaccagcat 420

ggcttccaac ttatatgctc atcaagtcag acaaactcga ctatgagagg atatgatcgc 480

cggatgagag actgcgaggg agaacaatgt ttgtgcata 519

<210> 2538
<211> 603
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316009h12b1

<400> 2538

tgctctcaag ctcaacactt tgttacatct agcggatttg gatttcttta acaactaagg 60

ttcctgtttt taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa 120

ctctttcttt tctttacaaa tcccaaaacc tttactagac ttttttctgct tctttagctt 180

acttcaccta gagtcttcta ccttttctta tcattgaatc aacccctttt tttttttctt 240

ttaaacacat cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg 300

cgaactagaa ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag 360

cttaatcgga ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct 420

aggttcgggt ttgggctaac tgctctaata aggagagtca gctacttgga ttaaaaagag 480

tgatcaaaat gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg 540

cagacatgat aattaaagat tagattcagg ctcaaattga cagggaatgg tatcagatca 600

tga 603

<210> 2539
<211> 573
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a03b1

<400> 2539

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acatgagcag acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcag 540

ggcagctctc agcaccctca agattgtcca ttc 573

<210> 2540
<211> 606
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a04b1

<400> 2540

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

tgctaccttg tcttatcatt gaatcaaccc ctgtttttt ttcttttaaa cacatgccag 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagctcaa tcggaataag 360

acctcacata cactcacaag ttatataggg ctagaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac tcggattaaa aagagtgatc aaagtgaata 480

agaaaatcca agtactttac ggtatccatg agttcagatt tgatgcacac atgacaatta 540

aagattcgat cacgttcaaa ttgataggga atggtatcag atcatgccag tgtggcgagt 600

agagca 606

<210> 2541
<211> 666
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a06b1

<400> 2541

cactttgcta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat caggttcaaa ttgataggga atggtatcag atcatgacaa gtgtggcgag 600

tagagcaatc taagcttggt cagttttttt ttttttaaat tcattgctat gcacagacac 660

tagcac 666

<210> 2542
<211> 381
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a07b1

<400> 2542

acatctagcg gatttggatc tctctaacaa ctaaggttcc tgtttttaac attttaaagc 60

caagggcttt ttcccatctg caatagctaa caagaactct ttgttttctt tacaaatgcc 120

aaaaccttta ctagactctt tctgcttctt tagcttactt tacctagagt ctggtacctt 180

ttcttatcat tgaatcaacc ccttttttgt tgtcttatag acacatccca acccaaagta 240

taagcgccca cctagcccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

gtgtctgtgg tacgaaccta acactttgta ccaaagctaa tcggaattag acctgacaaa 360

cactcacaag ttatataggg c 381

<210> 2543
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a10b1

<400> 2543

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttgt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataa 537

<210> 2544
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011a12b1

<400> 2544

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc cttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc caaatgaata 480

agagaatccc agtcttttac ggcatccatg aggtca 516

<210> 2545
<211> 560
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b01b1

<400> 2545

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagcattca aagaaatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caatgccaag gacgttgcca acatgacgcc cgaggagcgt ctagccacgg cgctcagggc 540

agctctcagc accctcaaga 560

<210> 2546

<211> 564
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b03b1

<400> 2546

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acatgagcag acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aatgacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcag 540

ggcagctctc agcaccctca agat 564

<210> 2547
<211> 638
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b04b1

<400> 2547

cgtaacactt tgctacatct agcggatttg gatttcttta acaactaagg ttcctgtttt 60

taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt tttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga taggggatgg tatcagatca tgacagtgtg 600

gcgagtagag caatctaagc atgggtccag tttttttt 638

<210> 2548
<211> 647
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316011b06b1

<400> 2548

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tgaacagatg gggatactat ccactcattc taataggatc atgggcattc ggcactatta 120

accgtatcca tgatttcatc gagccagggc ataagatctt ctggctctca gttcttgacg 180

ttgggacagc tgcactaatg gtagcaaacc tatcaaataa ataagttata aaattcgcca 240

tagatcatct ttgctcttcc cgagtcgatg ttctgaatgt tgtattttca gggcttgttc 300

aattcaatag cctatggttt caacagctca gagcgtcgag caatccatga gagactggag 360

ctgtaagtca ccaccgatct ctttgggttg ctatattatt cccaataatc aatgaagctt 420

gatttttatg aaacccttgg tctgctagat tcttgccaga acggctatat cgatggcttc 480

caagcaattt cagaccacaa aaccatctga ttctacatca gcagcaacaa cagcgaagcg 540

aaatggtatc actcaagacc gaggaccagc aatgacacta actttcaact aatacattgg 600

accgataaca ngaaggcggc gatgataatc agcgttggat ggagaga 647

<210> 2549
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b07b1

<400> 2549

tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa cattttaaag 60

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caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag tcttgtacct 180

tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac 300

tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata agacctgaca 360

aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggttcg ggttaactgc 420

tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa taagaaaatc 480

caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgatcat taaagattag 540

atcaggttca aattgatagg gaacggcatc agatcatgac agt 583

<210> 2550
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b09b1

<400> 2550

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ggcttgtgcg aatcacccaa aggagttatg ggttgctgac actgcccagc cttgatattt 120

acctacttta cgtcattgcc ctgagtgtaa cgttctgaga cgtgtcccag tttgtgcttc 180

cggattctgt tagggttggc gttggccaag gagtctcggt gagtggtgtg tataaagtaa 240

gaatgccatt aggaccgtgt atgccggtcc caactgttaa cttgaaagat accaagcaga 300

c 301

<210> 2551
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b11b1

<400> 2551

accactagct tcgttggaga tccatcaaag gaactaacga ggctagaggt tggttcttct 60

agcaaactta ggggccgcaa gtgtctggcc atttcctggc cttgcaccat atttccagcc 120

gctttccagc atttagtact ttggctgatg ggctcgcctg cagcagcagc agcagcagct 180

gagttcactc gggaaactgt tcgccggccg cttatatgga tatttgaatg ctaattgtcg 240

ggcgctaacc ccaagggcaa cccaccaagg cccacccctg gggcaaacgc atattgcgac 300

gatggggcgg ggaagtgcat atcgaagctt atctttattt cgtacccagg cactcctgat 360

gccctattca cgccgtgccc cccgaag 387

<210> 2552
<211> 593
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011b12b1

<400> 2552

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gac 593

<210> 2553
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c01b1

<400> 2553

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catgagcttt caaagaaatg ctgctggtgc tattcaacgt gatcgattct aacctcaaag 120

cgcccagatc ccaatgacga gctcgccgac gatgtccacc acgttgcagt tagcgccatg 180

ggccccgaat gcgaaccccg tcgacatggt ctggtccgct gtgccggtac tgcgatccgg 240

agacttgtcc cattcgacca tacagttctc gccctcctcg tcggagcttc agagcttcgc 300

cgtgaccctg catcaggtgg tcccttcgaa gctgtccagc cacagccgta gtggcattga 360

gatcctagta ctagacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcagcga gggcaccttt tacatggacc atacgacaag 480

ctccaatgcc aaggacgttg tccacatgac gcccgaggag cgtttagcca cagtgc 536

<210> 2554
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c02b1

<400> 2554

tccggttgtt acagttacag tttgggctca tgtccatata ctatcccttа catgaactct 60

gatgatggtc ttcaaagact attaaccgta ctcgactttt tatggtgcct tggcatacta 120

tcacctagag tctcagtacc tagtcgttat ggatcagaat gcaactccct ggttgtattt 180

cctttcaaac acatccgatc tcaaagtata cacgcacaat tagtgctatt tcggacgaaa 240

tgtgctaact gtagctccat gagacactgt ctatgtcatt acgctcctgt cacttcatac 300

caaggtttat cgcaatacga tctaaactga ctctctaggt atccacggct cgcaagagag 360

tgctagattg ggtccgggtt aactggtctc atga 394

<210> 2555
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c03b1

<400> 2555

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gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt gccattcgac cattcagttc tcgcccttct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg ttctcgacgt tgctcccctt ccgatagaca cggtgttcgt caacctggag 420

agcgaatcga caaaacggct ggagagcgtg aagggcacct tttacatgga ccatacgaca 480

aggcccaat 489

<210> 2556
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011c04b1

<400> 2556

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acatgagcat acaaagaaac gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtgga caatgtccac cacgttgcaa tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tgggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg tcccttcgaa gctgttcagc cacagccgca gcggcattga 360

gatcctcgtg ctagacgttg ctcccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaactgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc attcgacaag 480

ccccaatgcc aaggacgttg cccacatgac gcccgaagag cgtct 525

<210> 2557
<211> 558
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011c05b1

<400> 2557

ctccgacctc ttcccgcacc tagcaaatgg taagccaaga aagccaactg acggcattgc 60

acatgagcag acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcag 540

ggcagctctc agcaccct 558

<210> 2558
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c07b1

<400> 2558

acccagtctt tttaaattcc cacactcggt gcgttacgag tgctaaccga ctgtattaca 60

gatgatcctc ttccaccccg accgttgttg cactcgcaac aaagaggtga ttccacaggc 120

ttatagcgcc cagtatctac tatcaagagg ttatcaatat ccaccacgac agagttgtcc 180

atggaccccc taggggctcc ccggcggcat agactggacc aaaatgccca atctgccagg 240

acaggacttg agcccttgaa gcacacattc atctccatct ttacaaacct taaacagatt 300

ctaggcgctc ctatgtcaag cgtgccgttc ctaacttgtc ataaccatgc gcagcgtggt 360

tata 364

<210> 2559
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c08b1

<400> 2559

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acaaagaaat gctgctgctg ctattcaacg tgatcgattc taacctcaaa gcgcccagat 120

cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat 180

gcgaaccccg tcgacatggc ctggtccgct gcgccggtac tgcgatccgg cgacttgccc 240

cattcgagca tccagttctc gccctgctct tcggcgcttc agagctgcgc cgtgaccctg 300

catcaggcgg tccctttgaa gctgcccagc cacagccgca gcggcattga gatcctagtc 360

tgaacgttgc tccccttccg atagacacgg tgttcgtcaa cctggagagc gaattgacaa 420

agcggctgga gagcggtgag ggcacctttt acaaggacca tccgacaagc cccaatgcca 480

aggacgttgc ccacatgacg cccgaggagc gtctagc 517

<210> 2560
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011c09b1

<400> 2560

cgcacctagc agatggcgac gccaagaaag gcatctgacg gtattgcaca tgagcagaca 60

aagaaatgct gctggtgcta ttcaacgaga gcgattctaa cctcaaagcg cccagatccc 120

aatgacgagc tcgcctacta tgttcaccac cttgcactcg cgccatgagc gcccaatgcg 180

aaccccgtct acatggcctg gtacgctgtg ccagtactga gatccgggga cttgtcccat 240

tcgaccatcc aaatatcgcc ctcctcggtg gcgcttcaga gcttcaacga gaccctgcca 300

caggtggccc cttcagaagc tgtgcagaca cagacgacac gaggtcgaga tcctggtcct 360

ggacgttgct ccccttccgc tagacacgga gttcgctaac ctggagagcg aattgacaaa 420

tcggctggag agcggctagg gcaccttgta caatgacc 458

<210> 2561
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011c10b1

<400> 2561

tccacctttt cccgacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgaca acgaattgct gctgctgcta ttcaacgaga tcgattgtaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcaggcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg ggccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatgc aagatctcgc cctcctcgcc ggcgctttag agcttcggcg 300

cgaccctgca acaggtggcc ccttcgaagc tgttcagcca cagcccgagc ggtattgaga 360

tcctggtcct cgacgttggt ccccttccgc tagacacggt gttggtcaac ctggagagcg 420

aattgacaaa actgctggag agcggcgagg gcacctttta 460

<210> 2562
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011c11b1

<400> 2562

gcacttcgtt catctagcgg atgcggattc ctttaacaac tgatgtacct gttttgaaca 60

ttctaaagcc aagggctttt gcccatctac aatagctaac aggaactcgt gattatcttt 120

acaaatccca gcacctttac tagactttat atgattcttt cggtcacttg acctagagac 180

tgctaccttt tcttatcatt gaatcaaccc cgagttcttt ttcttttaaa cacatgccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtcctaa aaatgcgaac tagagctaca 300

tgagactcta tctctgtcgt tacgagccta acactgtcta ccaagcttaa tcggactaag 360

accgcacaag cactcacaag ttatataggg 390

<210> 2563
<211> 100
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d01b1

<400> 2563

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agatgagctg acatggaaaa gctgggggtg ctatcccatg 100

<210> 2564
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d02b1

<400> 2564

ctgacccttt tccgcggaga cgcctggggc gaaaaccact gcttagttat aggcctgtga 60

tgcagtggta ttaccctggc tagtatacgg ccgttcaagg agctgcagga gctggccgat 120

ggaacgctga gtggtatgtg tggatttcat ggcgagagat taccggcagg cccaactgct 180

gttgctgtgc gttcagcggt tccgatctac cagactgtcc gtaaccaata tacaagcttg 240

tgtacgtgtt ggtcaacctt gtgctgggc 269

<210> 2565
<211> 603
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d03b1

<400> 2565

acaaatttac acgctccctg catttcgtgt tctccccaaa tatattactg catctccttt 60

tccacccccа ccatattatc accgcaaaaa tggtggacca cggtatatcc tcacagctac 120

tcctatcaca caggttatca tagagccatt caaacagaga tttcgaaaag aacccctgct 180

gcctccttcg cggcacaaat ctgacccaaa tccccaattg agctggacag tctctaagca 240

cgtgaagcac agattcaact ccacctttac aaacctgaga cacattcgag gcgctaagat 300

gtcttcgatg ccgttcctca tctgtcataa ctatgtccag tttggttata tatattttct 360

gactatactt atatttatat atatttttcc taaatataac tattactttg gattatttgt 420

taaacatgtg catggattta actcaatctc aataaatgct tcttagtctt gtgactcttt 480

atcataattt ggtggtgaat aaatgtttta tttaccattg taaaaaaaaa aactgaaaat 540

ttgcgtaaat cattgagctc ttctttttтt tattttgact gttggcaacg tttctaatca 600

tat 603

<210> 2566
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d05b1

<400> 2566

cactttgcca catctagcgg attaggattt ctttacaact aaggttcctg cttttaacat 60

tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt gttttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctgtgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt gggtttgggt 420

taactgctct aataaggaga gtccgctact tggattaaaa agagtgatct aaatgaagaa 480

gaaaatccaa gtcttatacg gtatgcatga gttcaaattt gatgcagaca tgataattaa 540

agattagatt cagg 554

<210> 2567
<211> 632
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316011d06b1

<400> 2567

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtgttttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tcaggttcan attgataggg aatggtatca gatcatgaca gtgtggtcga 600

gtagagcaat ctaagcaagg tcaatttttt tt 632

<210> 2568
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d08b1

<400> 2568

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aaagctcaag ggcttttgcc catctcgagt acctcacgag aactctttct tttctttacc 120

tattccaaaa cccttactag actttgtccg ctcctctagc ttacttcacc tagagtcttc 180

tacctgttct tatcattgag taaacccctc tttttattta ttttaaacac atcccacccc 240

agctgtatga gcgcccacct actcctatct attccgaaga aagcgaacta agactacatg 300

cgacactatc tctgtctgta cgaacctaac actttctacc agagcttaat ctgaataaga 360

ccgtccatac actcacaagt tatatagggc ttgaaagaaa gtctaagctt gggtgtgggt 420

taaccgctct catatgagag tcagctactt ggattaaaaa gagtgatcaa aatg 474

<210> 2569
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d09b1

<400> 2569

ctttgccaca ctcagcggat ttggatttct ttacaactaa ggttcctgtt tttaacattt 60

taaagcccag ggcttttgcc catcttcaat agctaacaag aactctttct tttctttaca 120

aatcccaaaa cctttactag acctttttctg cttctttagc ttacttcacc tagagtcttc 180

taccttttt tatcattgaa tcaaccccctt tttttttttc ttttaaacac attccaaccc 240

aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac taacctaaca ctttctacca agcttaatcg gaataagacc 360

tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg gtttgggtta 420

actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa atgaataaga 480

aaatccaagt attttac 497

<210> 2570
<211> 285
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d10b1

<400> 2570

ttcgttcgaa tttcaagggc ttttgcccat ctccataact gggaagaact ctttcttttg 60

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gtcgggtacc ttaacttatc attgagggaa ccccttttt attttttctt gaagcacatc 180

ccaacccaaa gcctgagcga ccacctaggc ctatctagtc cgtaaaatgc gaactagaac 240

tacatgagac actatctctg acggtactaa cctaacactc tctac 285

<210> 2571
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d11b1

<400> 2571

ggacttatcc ctgcacgtag gcaaaggcac accaagaaag ccaactgacg tgtttgcaca 60

tgagcagaca tggaattgct gctgctgctc ttcaacggga tcgatagtaa ccacaaagcg 120

cccatattgc aatgacgaga tcctgaacaa tgtgcaccac gacagctggg ctcaaagtgc 180

ccctaatgcg aacccggttg tcttgggctg agcccatgag ccaagactga cagactgcga 240

ctcttcccat tctagcataa caatttaacc ctgatggtag gctcttcaga gcttaaagaa 300

tgacctgtgc ctacgtgtgc ccttcctagc tgaggagctt catgacccga ggcattgaga 360

tgctactggt cgacgttgct ccacttccgc tagacacaga gctcttcaac ctgcagagtg 420

aattgactaa acggatagag agctttgagg gcacctttta caaggaccat acgacaagcc 480

ccaat 485

<210> 2572
<211> 212
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011d12b1

<400> 2572

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ccatattgca tggacgtgat cgtggacaat gtgcatcacg tcacatggcg ggcctatagg 180

gcccctaatg cgaacctgtg tcgtcttggg ct 212

<210> 2573
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011e01b1

<400> 2573

ctagcaaatg gtctgccacg acagccgact gacggcattt cacatgagct tgtcaaggat 60

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cgagctcgtc gacgatgtcc accacgttgc tagtccgcca tgggcctcga atgcgaaccc 180

cgttgacatg gcctggtccg tcttgcctgt actgcgatcc ggcgactagt cctattcgac 240

catccagttc tagccctcct aataggcgct tcagagctct gccgggaccc tgctacatgt 300

ggcccccttag aagctgttca gtcacaggcg caatggcatt gagatcctcg tccctcacgc 360

tgcttccatt gggctagaca cagtgttcga gaacctggag agcgaatcgg ctaaacggct 420

ggagagcggc taggggggcct tttacaaggg ccctacgtca aggcccaatg ccaaggacgt 480

tgccaacatg acgc 494

<210> 2574
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011e02b1

<400> 2574

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cctgtttttа tcattttaaa gccaagggct tttgcccatc tgcaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggctt ggggtaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat gcaagtgttt tacggtatcc atgagttcaa atttgatg 538

<210> 2575
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011e04b1

<400> 2575

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taaataacat tggaaagcca cgggcttctg cccatctcca ataccttaca tgaactctac 120

cttttctata caaattccaa aacctttact agacttttta tgctatcttt agctaacttc 180

acctagagtc ttttaccatt gattataacc gaatcaaccc ctcttttaaa cacatttcaa 240

acacatacca tcccaacgta tatgcgccca cctagtccta tctatgccga aaaatgctac 300

actaaaactc catgagacac tatctatgct gacactaacc taacacttta taccagagct 360

taatctgact aagacctacc agacacttac aggttgtatg agggtcgaag gaaaggctag 420

ggttgggtgc tgtgataact gctgtcatct ggcgagacag ctacgagggt tcaaaagggt 480

gaacaaaatg catgtgtaaa accgaatcct tgacgggatc catgag 526

<210> 2576
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011e06b1

<400> 2576

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ctgtttttaa cattgtaaag ccaagggctt ttgcccatct ccaatagctt acaagaactc 120

tttctttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct ttgcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc tacccaatgt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gatacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaattagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taag 494

<210> 2577
<211> 240
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011e08b1

<400> 2577

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gggcgactca ccggcgatcc agcgcgtgag ctgaccatga tgtaaccatg accgatgatg 120

ctgctgtcat acccttatca gaccgtgatc atacaactgg cgtacatcat ggcctttcat 180

ggccattggg cgcctgtgta tgatctcatg agaaatgatg aactgagttg acctgttcgc 240

<210> 2578
<211> 577
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011e09b1

<400> 2578

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gcacatgagc tttcaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

atggcagctc tcagcaccct caagattgtc cattccg 577

<210> 2579
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f01b1

<400> 2579

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gtgtttatca ttgtaaagcc tggggctgtt gcccatctgg aatagctaac aagaactctt 120

tctgttattt acaaatccca aaacctttac tagactcttg ctgcttattt agctcacttg 180

acctcgaggg ttataccttg tcttatcatt gagatcaagc gcttctgttt tgtcttttaa 240

acacattgca acccaaagta tacgcgccca cctagcccta tctagcccag aaaaatgcga 300

actagaacta catgagacac tatctctgta gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctgtca atcactcaca agttatatag ggctcgaaag aaa 413

<210> 2580
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f03b1

<400> 2580

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gaccagacac tgaatgtgcg ctgctgctct gcacgggagc gaccatgacc taatagggac 120

cagtgacgat ggtcgatgtc cttgacgagg tccagtacgt tccactggcg ccatgatggc 180

cctttgcgaa ccccgtcgat atgggctggt gcgcatggcc aatgatgaaa tgcgtgcact 240

tgtccgattg gtgcatgcac atctggccct tcttgtcagc gctacagaga ctaaccaaga 300

ccctgcagct ggtggtccct tagctgatag acgagctcaa tcacacgagg actgagatcg 360

tcactggccg cggtgctaca attgcgctag acacgagagc cctgaacctg cccagcgtaa 420

tggccttgca gctgatgagc ctttagggcg cttgttacat agaccata 468

<210> 2581
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f04b1

<400> 2581

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ttttcacctc caagcgccct gactcgactg acgagcgttg ttttcgatgt ccaccacctt 180

gagagttgct ccatggtgcc acgaatgcaa tccccgccga catggctctg tttcagagag 240

ccggtaccgc aatgcgtaga ctcgcaccat gcgaccattc agtcgtagca ctcctactag 300

gagctcatga gacactacgt gtgcctgtac caagcggaca ctttgtagct gtcctaacac 360

agacaggacc gcactgagac tctcagtgct atatcgggc 399

<210> 2582
<211> 586
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316011f05b1

<400> 2582

gctctaaacc taacactttg ttcatctagc ggatttggat ttctttaaca actaaggttc 60

ctgtttttaa cattttaaag ccaagggctt ttgcccatct gcaatagcta acaagaactc 120

tttctttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacattcc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatgca tgagttcaaa tttgatgcag 540

acatgataag taaagactag attcaggttc aaatngatag ggaatg 586

<210> 2583
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f07b1

<400> 2583

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ctgtttttaa cattttaaag ctctagggct tttgcccatc tgcaatagct aacaagaact 120

ctttcttttc tttacaaatg ccaaaacctt tactagactt tttctgcttc tatagcttac 180

ttcacctaga gtcttctacc ttttgttatc attgaatcaa cccctctttt tttttgtttt 240

aaacacatgc caacccaaag tataagcgcc cacctagtgc tatctagtac gaaaaatgcg 300

aacttgaact acatgagaca ctatgtgtgt cgtgacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcctgaaa gaaagtc 417

<210> 2584
<211> 549
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f08b1

<400> 2584

ctctaaacgc taacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgtttttа acattttaaa gccaagggct tttgcccatc tgcaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttgttatc attgaatcaa ccccttttt ttttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatc taaaagagtg 480

atcaacatga ataagatcat ccaagttttt tacggcatcc atgagttcaa atttgatgca 540

gacatgata 549

<210> 2585
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f10b1

<400> 2585

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ctgaaaccac aggtgttgaa catatgggga tactatccac tcattctaat aggatcatgg 120

gcattcggca ctattaaccg tatccatgat ttcatcgagc cagggcataa gatcttctgg 180

ctctcagttc ttgacgttgg gacagctgca ctaatggtag caaacctatc aaataaataa 240

gttataaaat tcgccataga tcatctttgc tcttcccgag tcgatgttct gaatgttgta 300

ttttcagggc ttgttcaatt caatagccta tggtttcaac agctcagtgc gtcgagcaat 360

ccatgagaga ctggagctgt aagtcaccac cgatctcttt ggtttgctat attattccca 420

ataatcaatg aagcttgatt tttatgaaac ccttggtctg ctagattctt gccagaacgg 480

ctatatcgat ggcttccaag caatttcaga ccaaaaaacc atttgattct acatcagcaa 540

caacaacagc gaagc 555

<210> 2586
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011f12b1

<400> 2586

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tttgaaagtc gagggctttt gcccatctgc aatagctaac aagaactctt tctttttttt 120

acaaatccca aaacccttac tagacttttt ctgcttactt agcttacttc acctagagtc 180

ttctaccttt tgttatcaat gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctaagtctat ctagtgcgaa aaatgcgaac tagaactact 300

tgagacacta tttctgtcgt tacgaaccta acacttttta ccaagcttta aacggaataa 360

ggacctcaca aacactcac 379

<210> 2587
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g01b1

<400> 2587

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat aaaaagagtg atcaaaatga 480

ataagaaaat ccagtatttt acggtatcca tgagttcata tttgatgcag acatgataat 540

taaagaatag a 551

<210> 2588
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g02b1

<400> 2588

tccgacctct tcccgcacct agcaaatggt aagccaagaa agccaactga cggcatttca 60

catgagcaga caaagaaatg ctgctgctgc tattcaacga gatcgattct aacctcaaag 120

cgcccagatc ccaatgacga gctcgtcgac gatgtccacc acgttgcagt cgcgccatgg 180

gccccgaatg cgaaccccgt cgacatggcc tggtccgttg tgccggtact gcgatccggc 240

gacttgtccc attcgaccat ccagttctcg ccctcctcga aggcgcttca gagctttgcc 300

gtgaccctgc aacaggtggc cccttcgaag ctgttcag 338

<210> 2589
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g03b1

<400> 2589

taacactttg ttacatctag cggatttgga tttctttaac aactaagggt cctgtttttt 60

tcattttaaa gccaagggct tttgcccatc tccgatagct cacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactc tttctgcttc tttagcttac ttgacctaga 180

gtgttctacc ttttgttatc attgaatcaa ccccttttt ttttttcttt aaacacatgc 240

ccacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ataccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagactag ggttgggttt 420

gggccaactg ctctcataag gagagccagc tacttgggct aaatagagtg gtcaaaatga 480

ataagaaaat gccagtgttt tac 503

<210> 2590
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g05b1

<400> 2590

agcggatatg gatttctgta acaactaagg accctgtatt tatcatggta aagccaaggg 60

cttctgccca tctccaatag cttacaagaa ctctttcttt tctttacaaa tcccaaaacc 120

tttactagac ttttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta 180

tcattgaatc aacccctttt tttttttctt ttaaacacat gccaacccaa agtattagcg 240

cccacctagt cctatctagt ccgaaaaatg cgaactagaa cttcatgaga cactatctat 300

gttgttacta acctaacact ttctaccaag cttaatctga ataagacctc acaaacactc 360

acaagttata tagggcttga aagaaagtct aggtttgggg ttgggttaac ggctctcata 420

tggagagtca gctacttgga ttaaaaagag tgatcaaa 458

<210> 2591
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g06b1

<400> 2591

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cctgattcga ctgacgaggt cgtcgtcgat gaccaccacg ttgtggtcgc gccatgggcc 180

ctgaatgcga tccccgtcta catggtctgg ttcgatgagc cggtactgcg atgcgtagac 240

ttgtaccatt cgaccattca gttgtagacc tcctagtagg agctcctgag attctacgtg 300

accctgcaac aggtggaccc ttcgtagct 329

<210> 2592
<211> 588
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g08b1

<400> 2592

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agatcaggtt caattgatag ggatggttca gatcatga 588

<210> 2593
<211> 531
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g09b1

<400> 2593

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ctgtttttaa cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatcca tgagttcaaa t 531

<210> 2594
<211> 76
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011g10b1

<400> 2594

aattaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaaaaaaaa aaaggggggc 60

cgttttaaaa ggatcc 76

<210> 2595
<211> 601
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h01b1

<400> 2595

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aggtgttgaa cagatgggga tactatccac tcattctaat aggatcatgg gcattcggca 120

ctattaaccg tatccatgat ttcatcgagc cagggcataa gatcttctgg ctctcagttc 180

ttgacgttgg gacagctgca ctaatggtag caaacctatc aaataaataa gttataaaat 240

tcgccataga tcatctttgc tcttcccgag tcgatgttct gaatgttgta ttttcagggc 300

ttgttcaatt caatagccta tggtttcaac agctcagtgc gtcgagcaat ccatgagaga 360

ctggagctgt aagtcaccac cgatctcttt ggtttgctat attattccca ataatcaatg 420

aagcttgatt tttatgaaac ccttggtctg ctagattctt gccagaacgg ctatatcgat 480

ggcttccaag caatttcaga ccaaaaaacc atctgattct acatcagcaa caacaacagc 540

gaagcgaaat ggtatcactc aagaccgagg accagcaatg acactaactt tcaactaata 600

c 601

<210> 2596
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316011h02b1

<400> 2596

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gtgcttctat acggcccttg aaggatttcc aggtgctgtt cgatggaatg ctcagtggga 120

tgtgtgaatt ttatggtcag attttcctgc caggttgaat agctgatgca gtgcattgag 180

tgttttccat ctaccagatt tttcctaatc gttatgcagg cttgtggatg ttttggtcga 240

gcttgtgctt ggattataaa tgtgacgttt ttagctctgt gaaagtaaag atgcctcgat 300

ataatttgtg cccataatac atgtttttttt aatgataaga tgtatcacat atgctgcagg 360

ttttgtatga atttccattc cgacctttct tgatctcaac tgctcttaat ttgttttatt 420

gttccaccaa tttt 434

<210> 2597
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h03b1

<400> 2597

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tttacatgag cagacaaaga aatgctgctg ctgctgttca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg tatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgctatc 240

cggcgacttg tcccattcga ccatccagtt ttcgccctcc tcgtaggtgc ttcagagctt 300

caccgtgacc ctgcaacagg tggtcccttc taagctggcc aagcacagcc gcagcggcat 360

tgagatcctc gtactcgacg atgctcccct tccgatagac acggtgtccg tcgacctgga 420

gagcgacatg accaaacggc tggtgagcgg cgagggcacc t 461

<210> 2598
<211> 564
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h05b1

<400> 2598

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg atgtgccggt actgcgatcc 240

ggcgacttgt gccattcgac catccagttc tcgccctcct cgtaggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg tagctgtcca gccacagccg cagcgggatt 360

gagatcctcg tcctcgacgt tgctgccctt acgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

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acggcaggtc tcagcaccct caag 564

<210> 2599
<211> 295

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h06b1

<400> 2599

actcgatagt tagtcaaccg caacaaagag gcgagaccaa aggtatatag cgcaccagat 60

acctactaac acagatggta tacatatagc caccacaaac agagattctc catggacccc 120

gtaggtgacc cttggcggca cagactggac ccaaatgccc aatctagcag gacagtattt 180

aagcaagtga agcatagatt catctccatc ttcacaaacc tgagacacat tcgaggcgat 240

catatgtcat gtaggccgtt cctaatttgt cataactatg cgcagcgggg ttata 295

<210> 2600
<211> 565
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316011h07b1

<400> 2600

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gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

anggcagctc tcagcaccct caaga 565

<210> 2601
<211> 520
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h10b1

<400> 2601

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gaggagtcag ctacttggat taaaaaagag 480

tgatcaaaaa tgaaataaga aaaatcccaa gtatttttac 520

<210> 2602
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h11b1

<400> 2602

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ttttaaagtc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac tttgattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtttttt 498

<210> 2603
<211> 382
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316011h12b1

<400> 2603

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actgacggca ttgcacatga gcagacaaag aaatgctgct gctgctattc aacgagatcg 120

attctaacct caaagcgccc agatcccaac gacgagctcg tcgacgaggt ccaccacgtt 180

gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgatgtgcct 240

gtactgccat ccggcgactt gtgccattcg accatccagt tctggccctc ctagtgggag 300

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ctgagctgga ttgagatcct cg 382

<210> 2604
<211> 539
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a01b1

<400> 2604

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aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgc 539

<210> 2605
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a04b1

<400> 2605

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gactgcgtag atctgcgtct gcaccgtact cccgtcggcg ctcctccccc cgccatgacc 180

gcacctgcct gccagacgct cagctactta aaagaacaaa cgccggaagg taaggtgaaa 240

tttgcggcac aggagaaaga ccttgagtca gatgaaaccc tttgggcctt gtacgagcgc 300

tggtgcgagg ctttcaacca aaagcgtgac catgatgaga aggctcgccg gttcaacaca 360

ttcaagaaga ccgttctgca cattcacaac aagcccaatg tgggctaccg aaggggaata 420

acccaattc 429

<210> 2606
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a05b1

<400> 2606

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gcacatgagc tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccagg actgcgatcc 240

ggcgacttgt cccattctga gcatacagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

agccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatgctc gtgctcgacg ttgctccccc tccgctagac acggagttcg tcaacctgga 420

gagcgaattg acaaaacggc tatagagc 448

<210> 2607
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a06b1

<400> 2607

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cattgtaaag ccaagggctt tcgcccatct ccaatagcta acaagaactc tatcttttct 120

ttacaaatcc cagcaacctt cactagactt tctctgcttc tttagcttac ttaacctaca 180

gcaccctaac ttttcttatc attgaaacaa ccccatcaac cctttctttt aaacacatcc 240

caccccaaag tataagcacc cacctcgtcc tatttagtcc aaaaaatgcg aactagaact 300

acttgagaca ctatctatgc tgttacgaac ctaacactcc ctaccatgct taaccggcat 360

aagacctcac aaacactcac aagctatatc gggcttgaaa gagcgtctaa gatagggttt 420

gggttgactg gtc 433

<210> 2608
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a07b1

<400> 2608

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taacgatcag atcatggccg gatagacttg gttagtcttg cgtggacgcg ctaggtgcac 180

cttaaaaata gataatcgca taacatttgt ttccagcgag ttgatgtgat tcaggctgca 240

taaagctatg taacctaggg cacatcagaa cggctgagac ccacttggtg tttatccaat 300

agagtgatat aacttgtgta tttgcacgtt tgtgtcacat taacaaactt gttctagaca 360

ca 362

<210> 2609
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a09b1

<400> 2609

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aacattttaa agccaagtgc ttttgcccat ctccaatagc taacaagaac tctttttttt 120

ttacaaatcc aaccttactg acttttgttt tactacttac ctaagcttta ccttttttata 180

tgataccctt ttttttttt aaccatcaac caagataagc ccactatcta ttagtcaaaa 240

gcactaacta ctaacctttt gcgtcgacct acatttccac taacgataga ctacacctcc 300

agattggctg aaaagctagt g 321

<210> 2610
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a10b1

<400> 2610

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tgtttttaac attttaaagc cagtggcttt tgcccatctc caatagctaa caagaactct 120

ttttttttac aaatcaaact actgactttt gttttactac ttacaagctt tcctttctat 180

attgataccc ttttttttt taacacatca ccaagttagc ccactagcct attgccaaaa 240

tgcacaactc agaacacttt tgtgtcaact acactttacc actaatgaat aaacccaacc 300

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acaagataga atcagattac 380

<210> 2611
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a11b1

<400> 2611

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tgcacatgag cagactaaga aatgctgctg ctgctattca acgagatcga ttaactaagc 120

gccaatcatg cagctctcac atgtcacagt gatccccatg cccaatgcac c 171

<210> 2612
<211> 426
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012a12b1

<400> 2612

cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg gcattgcaca 60

tgagctgacg tttgaaatgc tgctgctgct attcaacgag atcgattaac ctaaagcgcc 120

aatcatgcag ctgcacatgt cacactgctc gccatggccc aatgcaaccg cactggctgt 180

ccgtggcgac tgaccgcact gtcatcacca tcagtctgcc tctgcggctc aagttgcgac 240

ctgacagggc cttaagtgtc cccagccagg gatagactgc tcacgtgtcc ttcgtagaac 300

ggtcgcacct gaagcaatgc aacggtgaag cggagccctt acagcctcac agccatgagg 360

cttcccagac ccagaggtag ccgcctagga cttacaccta atgtcatcgc atgttcgtgc 420

ttgcgc 426

<210> 2613
<211> 569
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b01b1

<400> 2613

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tcaggttcaa attgatagg 569

<210> 2614

<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b02b1

<400> 2614

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt tacctagagg 180

cttctaccct ttcttatcat tgaatcaacc cctttttttt ttttttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtcccg aaaatgccaa ct 292

<210> 2615
<211> 551
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b03b1

<400> 2615

acacttcgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt gtcttatcat tgaatcaacc cctttttttt tttctttaa acacatgcca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atagagacac tatctctgtc gatacagaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggctcgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagcg atcaaaatga 480

ataagacaat ccaagtcttt tacggtgtcc atgagttcaa atctgatgca gacatgataa 540

ttaaagatta t 551

<210> 2616
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b05b1

<400> 2616

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cgcccccgga cacgccgacg ccagcggata ccccgacctc tcgttcggtc gagtagccag 120

gatctgagtt ttccacccta caattccact ccccgttcgg tggcgtctcc tgcgaccccg 180

ccgacggagc atatagacac atcgacttcg ccggacaaga tgggatcgac gcctacgaca 240

gctacgaggg actctctgtc tgtggcgaca gacaaaat 278

<210> 2617
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b08b1

<400> 2617

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gggatgcttt gttgcttgta ccgtcttgat taagtaactt tctgtgatcc tgtgcgcgag 120

gaactggatg gatgctggtg tgtcttctat gataccgctt gagatgaata aatgcttgtt 180

actcctctga acttttgtga caaactcctt tccactaacg 220

<210> 2618
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b09b1

<400> 2618

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ctactagcgc ccaatcaatg acagctgcac atgtcaccac gttgatcccc tggccccaat 180

gcaaccccgc acatggctgt cgtggccgct catccgactg tcatcaccat cagtctgcct 240

ctgtcgctta agttgcgacc tgccagggcc ttaagtgccg ccagcgaggg ttaatctcgc 300

cacgtgtcct tcgtagacac ggtgcaccga agaatgcaaa cgt 343

<210> 2619
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b10b1

<400> 2619

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tgcacatgag cttacgtaga aatgctgctg ctgctattca acgagatcga ttctacctaa 120

gcgccaatca tgacagctgc acatgtccac cacgtgatcc cctggcccca atgcaccccg 180

cacatggctg tcgtggccgc tcatccgact gtcatcacct catttgcctc tgtgggctaa 240

gttgcgacct gacagggcct taagtgcagc cagcgagggt taacctgtcc acgtgtcctt 300

cgtgaacggt cgaactgaag gatgcaacgt gaagcgagga cttcagactc acagccatgc 360

a 361

<210> 2620
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012b11b1

<400> 2620

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tgacggcatt gcacatgagc agactaggaa atgctgctgc tgctattcaa cgagatcgat 120

<210> 2621
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c01b1

<400> 2621

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ttttaaagcc aagggctttt gcccatcttc aatcgctaac aagaactctt tatttttctt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

tcctaccttt tcttatcatt gaatcaaccc cattttctcc tttcttttaa acacatgcca 240

acccaaagta taagcggcca cataggccta tctagtccta aaaatgcgaa ctagagctac 300

atgagacact atctctgccg ttacgagcct aacactttct accaagctta atcggactaa 360

gacctcacaa acactcacaa gttatatagg gcttgataga aagtctaagt atgggtttgg 420

gttaactgct ctaataagga gagtcagc 448

<210> 2622
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316012c02b1

<400> 2622

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gctaaagcca agggcttttg cccatctcca atagctaaca agaactctgt gtttttttta 120

caaatcccaa gacctatact agactttatc tgcttcttta gcttacttca cctacagcct 180

cctaactgtt cttatcatgg aatcaacccc attaatcctt tttttgaaac acatcccaac 240

ccaaagtgtg agcgcccaca tagtgctatc tagtccgaaa aatgcgaact agagctacat 300

agagacacta tatatggcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaag cactcacaag tcatataggg cttgatagaa agtctaagat tgggcttggg 420

ttcactgctc taataaggag agacagctgc ttggattaaa aagagtgatc aaaatgaatt 480

ataaaatcca agccttttta 500

<210> 2623
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316012c03b1

<400> 2623

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ctcaaggcgg cgctcgccgt gatcatctcc acgctcatct tcgtctttgc cggccagggc 180

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tctaagtcgt gatagcactc tctttgtccc t 271

<210> 2624
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c06b1

<400> 2624

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agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gacgcgccat 180

gggccccgaa tgcgaaccct gtcgacatgg tctggaccgc cgtgccggta ctgcgatccg 240

gcgacttgag ccattagacc attcagttct cgcactccta gtcggtgcta tagaggtttg 300

ccatgaccct gcgacacgtt gcccc 325

<210> 2625
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c08b1

<400> 2625

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ctgtttttaa cattttaaag ccaggggctt ttgcccatct ccaatagcta acaagaactc 120

ttttttttta caaatccaac cttactagac ttttgtttta ctacttacct aagctctcct 180

ttttatatga taaccccttt tttttttaa acacatcacc caagataagc cccactgtct 240

attgccgaaa agcactaaac tactgaacac tatttgtgta caacctaaca ctttacagct 300

aat 303

<210> 2626
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c09b1

<400> 2626

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tacaatccaa ccttactaac ttttgtttta ctacttacaa gctttccttt cttatatgat 180

aacccttttt tttttaacac tcaccaagat acgccactag cctattatca aaatgcacta 240

actactaaca cttttgcgta caacctcact tta 273

<210> 2627
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c10b1

<400> 2627

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cggcggggcg gacttacgga tcaacaggcc gacacggggg cgggcggccg cggcgggcgg 120

agtggac 127

<210> 2628
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c11b1

<400> 2628

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gaaattttta tgacaccctg gatgtgatac tcgtctggac gtgacatcaa ttaatcatgt 180

acatgaaaaa aaaaaaggcg cgttaaggat caagtactac cggctgcaga tacttttatg 240

gcactaaatt attatggcgc gttacacgct gatgaaactg ggtacaataa tgctgagaat 300

cctttgcgtg gtatacaaag gcgaccacgc ttcacatgca gctatggatg acccctgacg 360

ccatacc 367

<210> 2629
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012c12b1

<400> 2629

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gtgttgaaca ttaaacggat actatccact cattctaata ggatcatggg catcgcacta 120

taaccgttca tattcatggc cgggatagac tttggcttag tcttgcgtgg acactgacta 180

atggagcaaa cctataataa tagtataaat cgcataatca tttgctttcc gagcatgtct 240

gaagtgtttt caggctgtca attaatacca tggtcaacag tcagggtcac aatcatgaag 300

atggactgaa gtacaccatc tcttggttgc ttatatccaa tataatgagc tcgttttata 360

aaccctggct 370

<210> 2630
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012d01b1

<400> 2630

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gtgtgcgaac ctttgcttat cattgaatca acccctttc tttttgttta taaacacatc 120

cgaacccaaa gactaagcgc gcacctagtc ctatctagtc cgaaaaatgt gaactactac 180

ttcgtgagac gctgtctctg tggagacgaa cataacactc tgtaccaagt ttgattggct 240

ttagacctca caaacactct cacgttatat agggcgtgaa agaaagtgta gggttg 296

<210> 2631
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012d04b1

<400> 2631

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gaaatgctgg tgctgctatt caacgagatc gattctaacc tcattgtgct catatcccaa 120

tgacgagctc gttgatgagg tccaccaggt tgtataggct ccttgagccc cagaatgcga 180

acctttgtcg aatggtctgg aacgctgtgc ctgttctgct atccggcaga ctttgaccat 240

acaaccatac cgttctcgtc gtcctatttg gagctaaaaa ggtttgccgt gacctctgtg 300

acaagctgtc ctttggaagt tcgacactca cag 333

<210> 2632
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012d06b1

<400> 2632

tacatctagc ggatttggat tgctttaaca actaatgttc ctgttttgaa cattttaaag 60

ccaagggctt tcgcccatct ccaatagcta acaagaactc tgtcttttct ttacaaatcc 120

caaaaccttt actagacttt gtctgcttct ttagcttact tcacctaaag tcttctacct 180

gttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta cctgagacac 300

tatctctgtc gatacgaacc taacactacc taccaagctt aatctgaatt agacctcaca 360

acactcacaa gttatta 377

<210> 2633
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e01b1

<400> 2633

cctccgaccg gtgcccgcac ctagcaaaga gggcagcgca cgaaatgctc aacctgatcg 60

gcatatgtta catggaggtt attcacccga agatgcctgc tgcctgctat tcaacgtgat 120

cgattctaac ctcaaagtcg cccatgatcc tca 153

<210> 2634

<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e02b1

<400> 2634

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ggctgaagct tatgaggaaa ggcttgacac aaaagagcaa ctgtgaggca taacagaatg 120

gagtggatct ccgtgaaaag ctttccagga agtcaaagaa actccaggga tacgaggcaa 180

gaaggggtga tccagaatca aggtctaatt atgatgaggg ggaaatccca aaatcaggat 240

ctggatatgg tttgaggggg agagtcccac aatcaagagc ctctactctt gtaagcc 297

<210> 2635
<211> 105
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e04b1

<400> 2635

cctggttgta acacttgaat gcccagggct tttgcccatc tgcagtaccc tacaagaact 60

ctttgttttc tttaccaaat cccaaaccct taatagacct tttcc 105

<210> 2636
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e05b1

<400> 2636

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ctgtttttaa cattttaaag ccaaggggct tttgcccatc tgcaatagct aaaaaagaac 120

tctttctttt ctttacaaat accaaaacct ttactagacc ctttctgctt ctttagctta 180

ctttacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctaatg ccaaaaatgc 300

caactagaac tacatgagac actatctttg tcgttacgaa ccttatcact ttttaccaag 360

ctttaatcgg gaat 374

<210> 2637
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e06b1

<400> 2637

aagctaacac tttgttacat ctagcggatt tggatttctt taacaactaa ggttcctgtt 60

tttaacattt taaagccaag ggcttttgcc catctccaat agctaacaag aactctttcg 120

tttctttaca aatcccgaaa cctttactag actttttctg cttctttagc ttacttcacc 180

tagagtcttc tacctttttct tatcattgaa tcaaccccctt ttttttttttc ttttaaacac 240

atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag 300

aactacatga gacactatct ctgtcgttac gaacctaaca ctttctacca agcttaatcg 360

gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaagt ctaggtttgg 420

gtttgggtta actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa 480

atgaataaga aaat 494

<210> 2638
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e07b1

<400> 2638

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggctcc tgtttttaac 60

attttaaagt caaaggctct tgcccatctc caatagctaa caagaactct ttttcttcaa 120

tcaaactact gacttttgtt ttactactca caagctctcc ttctatatga tcacccttttt 180

ttt 183

<210> 2639
<211> 184
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012e09b1

<400> 2639

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acatgagctg acaaagaaat gctgctgctg ctattcaacg agatcgttta acctaagcgc 120

caatcatgca gctgcacatg tcaccgtgag cggcctggcc caagcaaccc gcacatggct 180

gtcg 184

<210> 2640
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f01b1

<400> 2640

gttctccgac ctcttcccgc acctagcaaa tggttagcca agaaagccaa ctgacggcat 60

tgtacatgag cttacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cattcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacaggc gcaggggcat 360

tgagatcctc gtcctcgacg ttgcttccct tgcgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaaccgc tggagagcgg tgaaggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtc 527

<210> 2641
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f02b1

<400> 2641

aacgctaaca ctttgttaca tctagcggat ttggatttct ttaacaacta agggtcctgt 60

ttttaacatt ttatagccaa gggctttttg cccatcctgc aatagcttaa caggaacctc 120

tttctttttct ttacaaaatc ccaaaaccct ttactagaac tttttctgct tctttaggct 180

tacttcaacc ctaaaggctt ctacccttтc tttataattg aatcaacccc ctttttttтt 240

tttttttтaa aa 252

<210> 2642
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f03b1

<400> 2642

gctctaacgt gttctccgac ctcttcccgc acctagcaaa tggtgagcca agaaagccaa 60

ctgacggcat tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga 120

ttctaacctc aaagcgccca tatcccaatg acgagctcgt cgacgatgtc caccacgttg 180

cagtcgcgcc atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gatgtgccgg 240

tactgcgatc cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc 300

ttcagagctt cgccgtgacc ctgcaacagg tggtcccttc gaagctgtgc agccacagcc 360

gcagaggcat tgagatcctc gtactcaacg ttgctcccct tacgatagac acggtgttcg 420

tcaacctgga gagctgattg acaaaacg 448

<210> 2643
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f05b1

<400> 2643

ctaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctgtacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttтt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta aggttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaga 467

<210> 2644
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f06b1

<400> 2644

cggatttgga tttcttaaca actaaggttc ctgtttttaa cattttaaag ctcaagggct 60

tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc ccaaaacctt 120

tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc ttttcttatc 180

attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag tataagcgcc 240

cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca ctatctctgt 300

cgttacgaac ctaacact 318

<210> 2645
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f08b1

<400> 2645

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tcaagggctc atgcccatct ccaatagcta acaagaacct tcttctttca aatccaaacg 120

actgactttt gtcttactac ttactaagct ttccttttta tatgacaccc ttttttttt 180

taaacacatc aaccaagtta cccccaccta tccttctaga cgaaagcaac 230

<210> 2646
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f09b1

<400> 2646

gacgtcatag ctcttgtata ggtacctaag aatcactggc gcgttacaac gcggctgaaa 60

acctgcgccc cactt 75

<210> 2647
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f10b1

<400> 2647

ggtaacgaca gtgacatccc tacggagccc cttccattat ctgtgcgtcg ctgtgttcac 60

aaataacccg tgagctacac gcaattgggg cgagctaagg aaatccacag ctgcacaatc 120

gtgaagagat caactcattg gcccagagtg aaaaaatggt gttcgtcact gattgtcagc 180

actacaaagc gctgggagta caagagtgcg aagacaaggt ttgcatatct gatgggatgg 240

attatcacgt tcgtggactg ctgtgcaacg tgatgcgcaa actttatgtg tgtttaaaaa 300

aaagcgcgtt agacagtctc ctctgacgta ttttggacta tatatgc 347

<210> 2648
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012f11b1

<400> 2648

gcttaactgt tctccgacct cttcccgcac ctagcaaatg gtaagccaag aaagccaact 60

gacggcattg cacatgagtt ttacaaagaa atgctgctgc tgctattcaa cgagatgatt 120

acctaagcgc caatcaagca gctgcacatg tccacttgat cccctggccc aagcaacccc 180

actggctgtc gtggcgactg accgcactgt catcactcag tctgctct 228

<210> 2649
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012g01b1

<400> 2649

gctctaacgc taacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaa 555

<210> 2650
<211> 533
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012g02b1

<400> 2650

gctctaacgt gtactccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccga 60

ctgacggcat tgcacatgag cagacaagga aatgctgctg ctgctattca acgagatcga 120

ttctaacctc aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg 180

cagtcgcgcc atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg 240

tactgcgatc cggcgacttg tcccattcga ccatccagtt ctagccctcc tcgacggcgc 300

ttcagagctt cgccgggacc ctgcaacagg tggcccctta gaagctgttc agtcacaggc 360

tgagcggcat tgagatcctc gaactcgacg ttggtcccct tgcgctagac acagtgttcg 420

tgaacctgga gagcgaattg acaaaactgc tggagagcgg ctagggcacc ttttacaagg 480

accattcgac aagccccaat gccaaggacg ttgccaacat gacgcccgag gag 533

<210> 2651
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012g03b1

<400> 2651

gctctaaacg ctaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat a 401

<210> 2652
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012g04b1

<400> 2652

gctctaacct aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc 60

ctgtttttaa cattttaaag ccaagggctt ttgcccatct gcaatagcta acaagaactc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtgtttt acggtatcca tgaggtc 527

<210> 2653
<211> 328
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316012g06b1

<400> 2653

tctacgacct nttcccgcac ctagcaaagg gtgacgccaa gaaagccaac tgactgcatt 60

gcacatgaac atacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

tagcgcccag atgcaaaaga caagctggtc gactatgtgc accacgttgc acaagcccca 180

tgggctccca aggcgagcag agcagacatg gtcatttcca ttgggacgga actgagatcc 240

ggggagtagc tccataccac catccagata tgggcctcct ccactgcgct tcagagcttt 300

gtcgtgaccc tgtgacatgt ggccccctt 328

<210> 2654
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316012g09b1

<400> 2654

gctctaaccc taacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgtttttа acattttaca gccaagggct tttgcccatc tccaatagct aacaagactt 120

ttttttttaca atccaaacta ctgatttctg tcttactact cacctaagct ctccttttt 180

atattgataa ccctttttt ttttaacaca tcacc 215

<210> 2655
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316012g10b1

<400> 2655

gctctaaagc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagact 120

ttttttttt caatccaacc tttactagac ttttgtttta ctacttacct aagctttcct 180

ttttatatga taccctttt ttttttttaa cacatcacca agatacgcca ctagtctatt 240

agtcaaaatg caactaacta ctagacactt ttgtgtacaa cctcacttta ccagc 295

<210> 2656
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012g11b1

<400> 2656

ctctaacgct caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgtttttа acattttata gccaagggct tttgcccatc tccaatagct aacaagactt 120

tctttttttа caatcaaacc tactgacttt tgttttacta cttactaagc tttccttttt 180

atattgataa ccctttttt tttttaaaca catccaccca agatagccca cctgcctatt 240

atcaaaatgc actaactcat gaacactatt tgcgtaca 278

<210> 2657
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h02b1

<400> 2657

gctctaacgc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggctaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaat 489

<210> 2658
<211> 638
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h04b1

<400> 2658

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtattcat gagttcaaat ttgatgcaga catgataatt 540

aaaagattag attcaggttc aaattgatag ggaatggttt cagatcatga cagtgtggtc 600

gagtagaaca atctaagcat ggttcagttt tttttttt 638

<210> 2659
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h05b1

<400> 2659

acaactgacg actgtgggct taacacatga acgcccaggg ctatggtgca gctgctatag 60

atcgcgagaa ctttttatct tattgagcaa agccacaacc gacactcgac tttacgtggt 120

tcaccagctt acttcacctc cagggtccta ccttgcgatc tcatgtgaac aagcccttgt 180

tcgttgtgct tgtaaccgca tcccagccac atagtactag cgcccatcta gttctatcta 240

ctcctgaaaa atgctaacta gatctacctg aaac 274

<210> 2660
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h06b1

<400> 2660

ctcaacactt tgttacatct agcggatttg gatttcttta acaactaagg ttcctgtttt 60

taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt tttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaaagtc ta 412

<210> 2661
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h07b1

<400> 2661

gctctaaagt gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa 60

ctgacggcat tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatatc 120

tacctaaagc gccaatcatg cagctgcaca tgtcaccact tgatccccat ggcccaatgc 180

aaccgcacat ggctgtcgtg gccgctgatc cgactgtcat cacctcagtc tgcctctgcg 240

gcttaagttg cgacctgaca gggcctcaac tgccgccagc gagggatgaa tctgtccacg 300

tgtccttcgt gaacggtcga actgaagaat gacaacgtga agcgaggccc ttacagcatc 360

acagcatgca gactgcacta cccagagcgt accgcctagg agttacacta gatgcatcgc 420

atgttcgtgc ttggcat 437

<210> 2662
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h08b1

<400> 2662

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatatc tacctaaggc 120

caaccaagca gtctcacatg tcacattcag ccccatggcc caatgcaacc cgcacatggc 180

tgtcgtggcg actgcaccgc gactgtcatc accatcagct gcctctgtgg cttaagttgc 240

ggactgacgg ggcctcaagt gcacccagcg agggatgaac cctctcacgt gtcctt 296

<210> 2663
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h09b1

<400> 2663

gctctaaagc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagact 120

ctttttttta caatccaaac ttactagact tttgttttag tacttaccta agttttactt 180

tttatatgat acccttttt ttttttaacc atccaccaag atagcgccac tgtctattag 240

ccgaaaagca cagactacta gaactatttg tgtacaacta cactttacag ctaatggata 300

gacacaacac tacagtattg ggtgagaagc tggtggttgg tactgtctat agaagcagtc 360

tgataa 366

<210> 2664
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h10b1

<400> 2664

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tgacggcatt gcacatgaac ttacaaagaa atgctgctgc tgctattcaa cgagagtatt 120

acctaaagcg ccatccaatg cagctcgcac atgtccacca cgttcagccc catggcccaa 180

tgcacccctc acatggctgt cgtggcgact gatccgactg tcatcaccat cgtctgcctc 240

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cacgtgtcct tc 312

<210> 2665
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316012h11b1

<400> 2665

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcat ctacctaagc 120

gccaatccaa gcagctgcac atgtcacccg tgagcgccat gggccaatgc acccgcactg 180

gctgtcgtgg ccgctgaccg gactgtcatc accatcagtt gcctctgtgg gctaagttgc 240

gacctgacag gggccttaag tgcacccagc gagggatgaa tctgtccacg tgtccttcgt 300

gaacgtgcga actgaaggat gcaaacgtga agggagggct ttcaggcatc acagccatgc 360

agcgtgcact gacccagagg taccgcctag gagttacacc taatgcatcc gatgtcgtgt 420

tgcg 424

<210> 2666
<211> 111
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a01b1

<400> 2666

cgacctcttc ccgcacctag caaatgggta ggccagaaaa gccacctgac ggctttgccc 60

atgacctgca ttttaaatgc tgctgctgct cttcaacgag accgatcacc t 111

<210> 2667
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a02b1

<400> 2667

cccgacctct tcccgcacct agcaaatggt aagccaagaa agccaactga cggcattgca 60

catgagctta atttttaaat gctgctgctg ctattcaacg agatcgattt cctaagcgcc 120

gaccaagcag ctgcacatgc cacacttgca tgcctggccc gagcacccgc actggctggc 180

cgtggcggtc tggatcgcac tgtcatcacc atcatctgcc tctctcgctt aagtcgcgac 240

ctgcacgggg ccttaattgt ctccagccag cgatgaatct atctcactgc tccttcctga 300

ccggctgaac tgaaggatgc aaacgtgaga ggcagggctt tacagcatca cagccatgca 360

gcctgcac 368

<210> 2668
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a05b1

<400> 2668

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gggctgcttc tgtagctggg agctggttca acttcctgac tgtcatttac attgggtttg 180

tctgcgcgca cacgctccct gtgctgtacg agaagtacga ggaccaggtc gacgacttcc 240

tctacagcat cctgggcctg ctccgagagc agtaccagaa actcgacagc ggcgtcctga 300

gcaggatacc ctccaagagg aacaagaaga gcgagtagat tgattagatc agatggacac 360

tcatgattta tcgagtgaaa tccca 385

<210> 2669
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a06b1

<400> 2669

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ccgggctcgt gctcccgcgg ctcgccatgg acccaggcct ggtgtacgac gccggcgcgc 120

aggactacgt cgacttcctc tgcacactca actacacggt ggagcagatg cggctgttcg 180

tcccggagct gaacaagtgc gacaggacga tccccggcgg cgtggccaac ctgaaccacc 240

cgtcgttcgt ggtggtgttc gacggccgca cccgcgtctg cacgctgacg cggacggtga 300

ccttggtgtc ggcgcgcccc gagagctaca acgtgacggt ctccgcgccc gacggtgtga 360

aggtgaccgt gacgccggcg acgctggagt tcagggtggc cgaacgagaa gaggagctac 420

agcgtgcag 429

<210> 2670
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a07b1

<400> 2670

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acccatccca 240

ccccaaagtt taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtgg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt tggggttggg 420

<210> 2671
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a08b1

<400> 2671

cgtgttctcc gacctcttcc cgcacctagc aaatggtaag ccaagaaagc caactgacgg 60

cattgcacat gagctgacat agaaatgctg ctgctgctat tcaacgagat cgatctacct 120

caaagcgccc agatcccaat gacgagctcg tcgacgatgt ccaccacgtt gcagtcgcgc 180

catgggcccc gaatgcgaac cccgtcgaca tggcctggtc cgttgtgccg gtactgcgat 240

ccggcgactt gtcccattcg accatccagt tctcgccctc ctcgtcggcg cttcagagct 300

tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc cagccacagc cgcagcggca 360

ttgagatcct cgtcctcgac gttgctcccc ttccgctaga cacggtgttc gtcaacctgg 420

agagcgaatt gacaaaacgg ctggagagcg gcgagggcac cttttacaag gaccatccga 480

caagccccaa tgccatggac gttgccaaca tgacg 515

<210> 2672
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a09b1

<400> 2672

cgctaacact ttgttacatc tagcggattt ggatttcttt aacaactaag gttcctgttt 60

ttaacatttt aaagccaagg gcttttgccc atctccaata gctaacaaga actcttttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta agtttgggtt 420

tgggttaact gctctaataa ggagagtcag cta 453

<210> 2673
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a11b1

<400> 2673

aaaaaaaatt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa aaaaaaaaa 59

<210> 2674
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013a12b1

<400> 2674

ctcacgcgta cgcccacgcg tgcggtgtgc tccagttccc cgtcgcagat cgcccggttc 60

ctgaaggccg gcaagtacgc cgtgtgggtc ggcgccggcg cccccgttta cctcgccgac 120

gtgctcgagt atctcgccgc cgcggctctg gagttgccca agatcgcggc tagggacaac 180

aagatgaccc tcatcgtgcc gagccacatg gagct 215

<210> 2675
<211> 195
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013b03b1

<400> 2675

ctctaagtgt tctccgacct cttcccgcac ctagcaaatg gtaagccaag aaagccaact 60

gacggcattg cacatgagca gacaaagaaa tgctgctgct gctattcaac gagatcgatt 120

aacctaagcg ccaatcaagc agtctcacat gtcacacttg atccccatgc ccaatgcacc 180

cgcacatggc tgtcg 195

<210> 2676
<211> 559
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013b09b1

<400> 2676

tgttctccga cctcttcccg cacctatgca attggtaagc caagaaagcc aactgacggc 60

attgcacatg agcagacaat gaaatgctgc tgctgctatt caacgagatc gatctacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgaa gagcgtctag ccacggcgct 540

catggcagct ctcagcacc 559

<210> 2677
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013b11b1

<400> 2677

gctaacactt tgttacatct agcggatttg gatttcttta acaactaagg ttcctgtttt 60

taacatttta aagccaatgt cttttgccca tctccaatag ctaacaagaa ctctctttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacattcc 240

aacccaaagt attagcgccc accttgtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc ttacactttc taccaagctt aatcggaatt 360

agaccttaca aacactcaca agttatatag ggcttgaaag aaagtctaag tttgggtttg 420

ggttaactgc tctaataagg aga 443

<210> 2678
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c03b1

<400> 2678

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cttacacgga aatgctgctg ctgctattca acgagatcga ttctaactaa 120

gcgccaatcc atgcagctgc acatgtccac cattgatccc catggcccca atgcacccgc 180

acatggctgg ccgtggccgc tgatccgact gtcatcacca tcagtctgcc tctgtcgctt 240

aagttgcgga ctgacggggc cttaagtgcc gccagcgagg gatgaatctg tccacgtgtc 300

cttcgtgaca cggtgaaccg aagaatgcaa acgtgaaggg aggccctttc aggcatcaca 360

gccatgcagc gtgcacatac ccgagggtac cacggctaga gttagaccta atgcattcgg 420

atgtcgtctt gcgcgatcgt ctactgcgct 450

<210> 2679
<211> 587

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c04b1

<400> 2679

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactcc tctttcttta 120

caaatcccaa aacctttact agacttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggctt gggtttgggc 420

taactgctct aataaggaga gtcagctact tggattaaaa agagtgatca aaatgaataa 480

gaaaatccaa gtattttacg gtatccatga gttcaaattt gatgcagaca tgataattaa 540

agattagatt caagctccaa ttgataggga atggtatcag atcatga 587

<210> 2680
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c06b1

<400> 2680

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttaactcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaat 487

<210> 2681
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c07b1

<400> 2681

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacattga aatgctgctg ctgctattca acgagatcga tttactcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcag 540

ggcagctctc agcaccctca aga 563

<210> 2682
<211> 560
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c08b1

<400> 2682

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tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttcactcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtc ctcgacgttg ctccccttcc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcat 540

ggcagctctc aacaccctca 560

<210> 2683
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c09b1

<400> 2683

gtccggtggc ggagtcacga gggccgaccg acgcgttcga acatgaaggg gacaagcaaa 60

tgctgctgct gctataagcg agacgtctaa cctcaaagcg cccagacccc aatgacgagc 120

tcgtggacca tgaccaccac gttgcagtcg cgccatgggc cccgaatgca aaccccgtcg 180

acatggcctg gtccgttgtg ccgagactgc gatccggcga cttgcgccat tcgaccatcc 240

agttatggcc ctcctcgtgg gcgcttcata gctgagacgc gaccctggac caggcggccc 300

cttcaaagct gaccagccac agccggaggg ggatcgagat cct 343

<210> 2684
<211> 376
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316013c10b1

<400> 2684

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catttgtcat ttctttcgcc catctccaat agctaacaag aactnttctt tctttacaaa 120

tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta gagtcttcta 180

ccttttctta ttattgaatc aacccctttt ttttttttctt ttaaacacat cccaacccaa 240

agtataagcc gcccacctag tcctatctag tccgaaaaat gcgaactaaa actacatgag 300

acactatctt ttgtcggttc cgaacctaac acttttttacc caagcttaat tcggaataaa 360

gaccctcaca aaacac 376

<210> 2685
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c11b1

<400> 2685

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaacagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacgggatcc atgagttcaa att 523

<210> 2686
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013c12b1

<400> 2686

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagacctaca 300

tgaaacacta tctttgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaat 519

<210> 2687
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013d02b1

<400> 2687

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tgcacatgag cttacaagga aatgctgctg ctgctattca acgagatcga ttctacctaa 120

gcgccaatca tgcagctgca catgccacca cgttgagtcc cctggcccca atgcacccgc 180

acatggctgt cgtggcgact gatcggactg tcatcaccat cagtctgcct ctgcgcctta 240

agcttgcgac ctcacagggc cttaagtgcc gccagcgacg gttagacctg ctacgtgtcc 300

ttcgtgacac ggcgaaccga agaatgcaac gtg 333

<210> 2688
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013d03b1

<400> 2688

gacctcttcc cgaacctagc aaatggtaag ccaagaaagc caactgacgg cattgcacat 60

gagcttacaa tcaaatgctg ctgctgctat tcaacgagat cgattctaac tacagcgcag 120

accaagcagc tgcacatgca cacgtgagcc gcaggcccga agcacccgca catggctggc 180

cgtggcggcg caccgggatg tcatcgcatc agtctgcctc tgtgccttaa gtcgcggact 240

gacagggcct taagtgcacc aagcgagggt tgaacctgtc cacgtgtcct tcgtagaacg 300

tgtcgaaccg gaaggatgac aacgtgaagg gaggacttac atgactcaca gccatgcaga 360

gtgcaagagc gagggtacca ggcaggagtt aacctaatgc atc 403

<210> 2689
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013d04b1

<400> 2689

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaatctc aagggctttt gcccatctcc aatagctaac aagaactcct ctttctttac 120

aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca catcccatcc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacac 306

<210> 2690
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013d06b1

<400> 2690

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cattttaatt tcagggcttt tgcccatctc caatagctaa caagaactcc gctttcttta 120

caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca cctagagtct 180

tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac acatcccaac 240

ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact agaactacat 300

gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat cggaataaga 360

cctcacatac actcacaagt tatatagggc ttgaaagaaa gtctaggttt ggggttgggg 420

gttaactggt tctaattaag gaagagtcca gcctaccttg ggatataaa 469

<210> 2691
<211> 504
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013d07b1

<400> 2691

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctcctctttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacg 504

<210> 2692
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013d08b1

<400> 2692

gctaacactt tgttacatct agcggatttg gatttcttta acaactaagg ttcctgttct 60

gaacatttta aagccgaggg cttttgccca tctgcaatag ctaacaagaa ctactctttc 120

tctacaaagc ccaaaacctc cactagactg cttctgctcc tttagctcac ttcagctaga 180

gccccatacc ccccttagc attgactcaa cccctggtct gtttcgttgt agcacacatc 240

tccaacccaa agtattagcg cccacctaga tctatctagt ccgctacatg cgagctctaa 300

ctacatgaga cact 314

<210> 2693
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013d12b1

<400> 2693

ggtagccaag aaagccaact gagggcattg cacaagatct tacatttaaa tgctgctgct 60

gctattcaac gagatggatt atactaaagc gcccagatcc caatgacgag ctcgtcgacg 120

atgtccacca cgttgcagta gcgccgtggg ccc 153

<210> 2694
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e02b1

<400> 2694

aactgttctc cgacctcttc ccgcacctag caaatggtaa gccaagaaag ccaactgacg 60

gcattgcaca tgatctgaca aagaaatgct gctgctgcta ttcaacgaga tatctaccta 120

agcgccaatc aagcagctgc acatgccacc acgtgatccc ctggcccaat gcaaccctca 180

ctggctgtcg tggccgctga tcgggactgt catcaccatc gttcgctctg tggcttaagt 240

tccggactgc cagggcctta agctgcgcca gcgagggatg aatctcgcta cgtgtccttc 300

gtgaacggtc gaactgaagc aatgcaaacg t 331

<210> 2695
<211> 150
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e03b1

<400> 2695

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ctggctctca gttcttgacg gtgggacagc tgctcgtaat ggtggccaac ctatcagatg 120

aacaagttat acaactcgcc atagatcatc 150

<210> 2696
<211> 589
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e05b1

<400> 2696

aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaatg ttcaagggct tttgcccatc tccaatagct aacaaccttt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agacaatcca agtattttac ggtatccatg agttcatatt tgatgcagac atgataatta 540

aagattagat tcaggttcaa actgataggg aatgtatcag atcatgaca 589

<210> 2697
<211> 187
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e06b1

<400> 2697

acacgatgtt acgcctagcg gatcaggagg tctgtaacaa ctgacgaccc aggggttagc 60

atttgaattt ccagggctgt ggggcatctg ctatagatcg caacgacttt tgctgttgtt 120

gaccaaactc aaaatcgtga agatagtctt ggagcttcac caggtgactg aagctagagg 180

gctcgac 187

<210> 2698
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e08b1

<400> 2698

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagccgtt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga 420

gcgaattgac ataacggctg gagagcggcg atggcacctt gtacatggac catccgccaa 480

gccccaatgc catggacgtt gccaacatga cgcc 514

<210> 2699
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013e10b1

<400> 2699

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tgctcatgag cttacaaaga aatgctgctg ctgctattca acgagccgtt ctaacctcaa 120

agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga 420

gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac cattcgacaa 480

gccccaatgc caaggacgtt gccaacatga cgcccgagga gcgtctagcc acggcgc 537

<210> 2700
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013e11b1

<400> 2700

aacgctaaca ctttgttaca tctagcggat ttggatttct ttaacaacta aggttcctgt 60

ctttaacatt taatgtcagg gcttgcccat tcaatagcta cacacctttc ttttctttac 120

aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac ctagagtctt 180

ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca catcccaacc 240

caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta gaactacatg 300

agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc ggaataagac 360

ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggtttg ggtttgggtt 420

aactgctcta ataaggagag tcagctactt ggattaaaaa gagtgatcaa aatgaataag 480

aaaatccaag tattttacgg catccatgag ttcaaatttg atgcagacat gataattaaa 540

gattagattc 550

<210> 2701
<211> 552
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013e12b1

<400> 2701

gctctaacgc taacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacacgacct 120

ttcttttctt tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt 180

cacctagagt cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa 240

acacatccca acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa 300

ctagaactac atgagacact atctctgtcg ttacgaacct aacactttct accaagctta 360

atcggaataa gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt 420

ttgggtttgg gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat 480

caaaatgaat aagataatcc aagtatttta cggtatccat gagttcatat ttgatgccag 540

acatgataat ta 552

<210> 2702
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013f04b1

<400> 2702

gttctccgac ctcttcccgc acctatgcaa atggtaagcc aagaaagcca actgacggca 60

ttgcacatga gcttacaaag aaatgctgct gctgctattc aacgagacga tctaatcctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggcccct aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ttggccctcc tcgtaggagc ttaaaagctt 300

cgccgtgacc ttgcaccagg gggccccttg gaagctgt 338

<210> 2703
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013f06b1

<400> 2703

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aggaggcccc gccccaccgg ttcggcgggt tgtcaaggaa aagcccgttg gtatctttcc 120

gcggccgggg ttgctacatg gcgcacgtga tgaaaagcct cctcgcggcc gcaggggctc 180

acgccaccct ttttaatttg taggccccca cctaggaccc cccgctgtgg aaggccgttg 240

gcctcccggc 250

<210> 2704
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013f07b1

<400> 2704

gctctaacgc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggg 60

tcctgttttt aacattttaa ttccaagggc ttttgcccat ctccaatagc taacacaatc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aataatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactctc taccaagctt 360

aatgggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggctaactgc tctaata 447

<210> 2705
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013f08b1

<400> 2705

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgc cgatacgaac ctaacactct ctaccaagct 360

taatcggaat aagacctcac aaacactcac atgttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggctaactg ctctaataag gagagccagc ttcttggatt gagaagagtg 480

agcaaaatga ataagaaaat ccaagcgttt tacgggatcc atgagtgcaa atttgatg 538

<210> 2706
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013g01b1

<400> 2706

gctctaacgc tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt 60

tcctgttttt aacattttaa tgccaagggc ttttgcccat ctccaatagc taacaagact 120

ctttttttt acaaatcaaa acctactaac ttttgtttta ctactcacct aagctttact 180

ttttatattg ataacccctt tttttttaa acacatccac caagataagc cccacctagt 240

ctattagtca aaatgcacta aactacatag acactatttg cgtacaacct acactttacc 300

aact 304

<210> 2707
<211> 271
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013g03b1

<400> 2707

ctctaaagct caacactttg ttacatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaaa accaagggct tttgcccatc tccaatagct aacaagaacc 120

ttctttttt acaaatccaa actactagac ttttgtttta gtacttacct aagctttacc 180

tttttatatg ataacccttt ttttttaac catcaccaag atacgccact gcctattgtc 240

gaaagcacaa acactgaaac ttttgcgtac a 271

<210> 2708
<211> 543
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013g06b1

<400> 2708

gctctaaagt gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa 60

ctgacggcat tgctcatgag cagacaaaga aatgctgctg ctgctattca acgagactat 120

ctaacctcaa agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca 180

gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta 240

ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt 300

cagagcttcg ccgtgaccct gcaacaggtg gccccttcga agctgtccag ccacagccgc 360

agcggcattg agatcctcgt cctcgacgtt gctccccttc cgctagacac ggtgttcgtc 420

aacctggaga gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac 480

catccgacat gccccaatgc caaggacgtt gccaacttga cgcccgagga gcgtctagcc 540

acg 543

<210> 2709
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013g10b1

<400> 2709

atacgatctc ttaccgaacc tagcaaaagg taagccaaga aagccaactg acggcatagc 60

atatgagttg acaaagaaaa gccgcagcag caaaacaacg agagacgcca acgctcaaaa 120

gcgcccagat acccaaagac g 141

<210> 2710
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013g12b1

<400> 2710

tcgatataca acaattgaac atagagaccg agaaggcgaa aacacgcgct cgggcccggc 60

ccgatcccgg atcttcgccg ccggcgacgc cggttggaga ggtgatgggg gaggtgcgcg 120

gtgctctata gcagctagta ggtgtagttc tagtttttcc ttagaggagt ttggcctagt 180

gccggagatt ggcgtcatgc cgatgaggat tttgctgccg gcgcgcccga gccgcgttcg 240

gtggttcctg gcgatactct tgttggtggt ggcggttggc tcgctgctgt tggaaggagg 300

tgcgctggaa tcctcggaaa taagctcgat gtcttccctg gtatgcagga atccccttcg 360

cttgctctcg ccgacggcag tcaccatggt ggtggtcaag tcgac 405

<210> 2711
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013h01b1

<400> 2711

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tcaacagtgc agctgatgga aggacccccc gacggcataa cgcgtggggg ggtcccaggg 180

ccgtcactga ggcctaggcc gtcttctttt cttctttccc gtcgcg 226

<210> 2712
<211> 320
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h02b1

<400> 2712

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tgtttttaac attttaaagc caagggcttt tgcccatctc caatagctaa caagaacctt 120

ttttttttaca aatcaaaacc ttactaactt ttgttttact acttacctaa gctttccttt 180

tttatattga taacccttttt tttttcttta aacacatcac ccaagataag ccccacctag 240

tctattatca aaatgcacta actactgaac actatttgtg acaacctaca ctttaccact 300

aatggataga ctcaacctac 320

<210> 2713
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h03b1

<400> 2713

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tacctaagcg ccaatcaagc agctcgcaca tgtcacacgt gagcccctgg cccaatgcac 180

ccgcacaggc tgtcgtggcg actgaccgga ctgtcatcac catcagttgc ctctgtggct 240

taagttgcgg actgacgggg ccttaagtgc acccagcgag tgatgaatct gtctacgtgt 300

ccttcgtgac acggcgcact gaaggatgca acgt 334

<210> 2714
<211> 560
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h04b1

<400> 2714

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacacaacc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag 540

acatgataaa ttaaaggatt 560

<210> 2715
<211> 646
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h05b1

<400> 2715

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acattttaaa tccaagggct tttgcccatc tccaatagct aacaaccttt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tcaggttcaa attgataggg aatggtatca gatcatgaca gtgtggtcga 600

gtagagcaat ctaagcattg gtcagttttt ttttttttc aaattc 646

<210> 2716
<211> 473
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316013h06b1

<400> 2716

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tgacggcatt gcacatgagc tgacaaagaa atgctgctgc tgctattcaa cgagacgatc 120

taacctcaaa gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag 180

tcgcgccatg ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac 240

tgcgatccgg cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc 300

agagcttcgc cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca 360

gcggcattga gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca 420

acctggagag cgaattgaca aaacngctgg agagcggcga tggcaccttt tac 473

<210> 2717
<211> 533
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316013h08b1

<400> 2717

gctctaaagt gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa 60

ctgacggcat tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagacgat 120

ctaatcctca aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc 180

agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt 240

actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct 300

tcagagcttc gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg 360

cagcggcatt gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt 420

caacctggag agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga 480

ccatccgaca agccccaatg ccaaggacgt tgccaacatg acgcccgatg agc 533

<210> 2718
<211> 598
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h09b1

<400> 2718

ctaacgctaa cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct 60

gtttttaaca ttttaaagcc aagggctttt gcccatctcc aatagctaac aagcgtcttc 120

ttttctttac aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac 180

ctagagtctt ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca 240

catcccaacc caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta 300

gaactacatg agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc 360

ggaataagac ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggtttg 420

ggtttgggtt aactgctcta ataaggagag tcagctactt ggattaaaaa gagtgatcaa 480

aatgaataag ataatccaag tattttacgg tatccatgag ttcaaatttg atgcagacat 540

gataattaaa gattagattc aggttcaaat tgatagggaa tggtatcaga tcatgaca 598

<210> 2719
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316013h10b1

<400> 2719

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tgtttttaac attttaaagc caagggcttt tgcccatctc caatagctaa caagactctt 120

cttttcttta caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgaaa aatgcgaact 300

agaactacat gagacactat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tatatagggc ttgaaagaaa gtctaggttt 420

gggtttgggt taactgctct aat 443

<210> 2720
<211> 377

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014a04b1

<400> 2720

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tcttccactc atttatagga catggcattc ggcctattaa ccgttcatga ttcatcgacc 120

gggctagatc tttggtctag tcttgcgtgg acagtgccta tggagcaact ataataatag 180

tttaaattcg catagatatt tgtttccagc gtgttgaagt gatttagggt gtaatcatag 240

ctaggttaac gtaggcgcag atcatgagat ggctgagtac caccgctttg gtgtttatcc 300

atataatgac tgattatgaa ctggctgtaa ttgcaaacgt ttcaggtcaa cattaacaaa 360

acttgattct acacaca 377

<210> 2721
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014a07b1

<400> 2721

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gctttgcatc tcatactaca gactcttttt ttttacagat caaaaccttt actaactttt 120

gttttactac taccaagttt taccttttat attgataccc ttttttttt aacacatcac 180

caagttacgc cactagtcta tttccgaaaa tgcactaact ctaacacttt tgtgtcaacc 240

tcactttacc actaatggta gactacaacc tac 273

<210> 2722
<211> 255
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014a08b1

<400> 2722

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caggcttgcc attcatagct acaggacttt ctttttttac gatccaacct ttactaactt 120

ttgttttact acttacctaa gttttacctt ttatattgat acccttttt ttttttaaca 180

catcaccaag ttacgccact agtctattag tcgaaatgca actaactcta acacttttgc 240

gtcaacctac attta 255

<210> 2723
<211> 582
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014a11b1

<400> 2723

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

agggcagctc tcagcaccct caagattgtc cattccggcg at 582

<210> 2724
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014a12b1

<400> 2724

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gcgaggcggg aaggcgccgg tcccggcgaa gaacaaaacg gagaatgtga ccaacccgct 120

gttcgagaag aggccgaagc aattcggcat cggtggcgcc cttccgccca agaaggacct 180

tcaccgcttc gttaagtggc ccaaggttgt gcgcatccag cgccagcgcc gcatcctcaa 240

gcagcgcctc aaggtgcccc cggcactcca ccagttcacc cgcaccctcg acaagaacct 300

tgcaacaaac ttgttcaaga tgcttgttaa gtaccggcct gaagacaaag ttgccaagaa 360

ggagaggctt ctaaagaggg cccatgctga agctgaaggt aaaactgttg aggccaacaa 420

gccaatagtt gtgaagtatg gccttaacca tgttacctac ctaatcgagc agagtatagc 480

ccagctggct gtcatagctc atgatgttga tccgattgag ct 522

<210> 2725
<211> 473
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014b01b1

<400> 2725

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ttaaagccaa gggcttttgc catctccaat agctaacaag aactctntct tttctttaca 120

aatcccaaaa cctttactag actctatctg cttctttagc ttacttcacc tagagtcttc 180

taccttntct tatcattgaa tcaaccccct ttttttttc ttttatacac atcccaaccc 240

acagtataag cgcccaccta gtcctatcta gtccgaagaa tgcgaactag aactacatga 300

gacactatct ctgtcgttac gaacctaaca ctctctacca agcttaatcg gaataagacc 360

tcacaaacac tcacacgtta tatagggctn gaaagatagt ctaggtgtgg gtgtgtgtaa 420

ctgctctaat agggagagtc agctacttgg attaaaagag tgatcaaatg aat 473

<210> 2726
<211> 391
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014b02b1

<400> 2726

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agcttttgcc attcatagct acagactttt ttttttacg atccaacctt tactagactt 120

ttgtttttac tacttacaag ttttactttt tatatgatac ccttttttt tttaacacat 180

caccaagtta cgccactagt ctattgtcga aaagcactaa ctctgaaact atttgtgtca 240

actacacttt accactaacg atagactcaa cctacagatt gggtgaagaa gtagttggtg 300

ggaactgtta aaagaagagt ctggtaaaga ggcaaagata anatcaagtt acggtctagt 360

aaatgtgaac tgtataagat aatagtaatg t 391

<210> 2727
<211> 197
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014b05b1

<400> 2727

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cttcatatct atgacatgca tgggcttacc gatcaggata caccaggata actttggttc 120

agttgcgtgg cagtcctatg gagaaccaca aaatagtata atcctaacat ttgtttccag 180

cgagctaatg tgattta 197

<210> 2728
<211> 234
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014b06b1

<400> 2728

gcacatgagc actcaaggat atggtgctgc tgctattcaa caagagcgat cgtgacctca 60

tagcgcggca gaccgaacga caagctactc tacgaggtcc accacgttac agccgcgcca 120

tggtgccaca atgccaaccc tgtgaacatg gcctgtttcg ttgtgcttgt actgcgatcc 180

cacgactagg ccatgcgacc atccagttct atctctcctg gagggcgcta aata 234

<210> 2729
<211> 538
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316014b07b1

<400> 2729

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catgacatac aagattgctg tgtgctatta acgagacatt ctacctcaag cggcagatcg 120

aatgacagct cgtcacgatg tccaccacgt tgcagtcgnc catgggcccc gatgcgaacc 180

ccgttacatg gcctggtccg tggccggtct gcgaccggna cttgtccatt cgaccatcca 240

gtttcgcctc ctcgtcggcg cttcagagct tcgcgtgacc ctgaacaggt ggcccttcaa 300

gctgtcagcc acagcgagcg gattgagatc ctctgctcga cgtgctccct tccgtagaac 360

ggtgttcgtc aacctgagag cgaattgcat aacggctggg agcgggaggg ccctttacaa 420

ggacattcac agccccatgc aggacgtgca acatgacccg agaggttagc acgggctagg 480

agtctacacc tcagatgtca ttcgcattgt tcgtgcttgc gcgatcgtct actgcgct 538

<210> 2730
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014b09b1

<400> 2730

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gagcgacaaa aatgctgtgt gtattcaacg gatcgattct acctcaagcg ccagatccca 120

atgacagctc gcgacatgcc accacgtgag tcgccatggc cccaatgcaa ccccgtcgac 180

atggctggtc gtgtgccggt actggatcgg gactgtcatt cgaccatcag tttcgcctct 240

cgcgggctta gagttcgcgt gaccctgcac aggtggccct ttaagctgtc agccacagcg 300

agcggcattg agacctcgtc tcacgttgct cccttcgtag acacggtgtc gcaacctgag 360

agcgaatgca aacggtggaa gcgggagggc cctttacagg accatcacag cccaatgcaa 420

ggacgtgcac atgacgccga gagcgttagc acgcgctagg cagcttcaca ccctaagatg 480

tcattcgcga tttgttcgtg ctctgcgcga tccgtactac ctgcgct 527

<210> 2731
<211> 676
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014b11b1

<400> 2731

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca tgacaagtgt 600

ggcgagtaga gcaatctaag cattggtcag ttttttttttt tttcaattca ttgctatgca 660

acagacacta gcaacg 676

<210> 2732
<211> 678
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014b12b1

<400> 2732

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aacattttaa agcttagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gacagtgtgg 600

tcgagtagag caaatctaag catggtcacg ttttttttttt tttcaaatca ttgactatgc 660

aacagacaac tagcaacg 678

<210> 2733
<211> 527
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014c03b1

<400> 2733

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tggctgtcaa gaatgctgtg tgtattcaac ggatcgattc tacctcaagc gcccagatcc 120

caatgacagc tcgtgacatg tcaccacgtg agtcgcccat ggccccgaat gcaaccccgt 180

cgaatggctg gtcgtgtgcc ggtactggat ccgggattgt ccattcacca tcagtctcgc 240

ctctcgtggg cttagagctt gcgtaccctg aacggtggcc cttcaagctg tcagccacag 300

cgagcggatt gagatcctcg tctcgacgtg tccccttcgt agacacggtg tcgtaacctg 360

agagcgattg caaacggtgg aagcgggagg gacctttaca agaccatcac agcccaatgc 420

aggacgttgc acatgacccc gngagcgtta gcacgggcta nggagtctca caccctaaga 480

tgtcattccg cgattgttcg tgctctgcgc gatccgtact actgcgc 527

<210> 2734
<211> 401
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014c04b1

<400> 2734

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gacaagaatg ctgtgtgcta ttaacgagat cgattctaac ctcaagcgcc agatcaatgc 120

nagctcgtga cgatgtccac cacttgagtc gcccatggcc ccgatgcgaa ccccgtcaca 180

tggctggtcg ttggccggta ctgcgatccg gtacttgccc attcgaccat ccagtttcgc 240

ctctcgtggg cttagagctt gcgtgacctg cacaggtggc ccttcaagct gtcagccaca 300

gcgagcggat tgagatctcg tctcacgttg ctcccttcgc taacacgggt tcgtcaacct 360

gagagcaatt gcaaaacggt ggaagcggga gggcccttta c 401

<210> 2735
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014c05b1

<400> 2735

tgatgctgct gcatatcatc ttgatcgtgt acctcaatca ggggctggcc gacgac 56

<210> 2736
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014c06b1

<400> 2736

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gcttgccatt catgctacag actttttttt tttacaaatc caacctttac tagacttttg 120

ttttactact tacctaagct ttacctttta tattgatacc ctttttttt ttaacacatc 180

accaagttac gccaccttcc tattatcgaa agcactaact ctaacacttt tgcgtcaacc 240

tcactttacc a 251

<210> 2737
<211> 529
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014c09b1

<400> 2737

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tgagcgacaa gaaatgctgt gtgctttaac gagatcgatt ctacctcaag cgccagatcc 120

catgacagct cgtcgacatg tcaccacgtt gagtcgccca tggccccaat gcaaccccgt 180

cacatggctg gtcgttggcc ggtctgcgat cgggacttgc ccattcgacc atccattctc 240

gcctcctgtc ggncttagag cttcgcgtac cctgcacagg tggcccttca agctgtcagc 300

cacagcgagc ggattgaatc ctcgtctcga cgtgctccct tccgtagaca cgggtcgtaa 360

cctgagagcg aatgcaaacg gtggaagcgg gagggccctt tacaggacca tcacagccca 420

atgcaggacg tgcacatgac ccgagagctt agcacgggct anggcagtta cacctcagat 480

gtcatccgcg attgttcgtg cttgcgcgat ccgtctactg cgctaccgg 529

<210> 2738
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014c12b1

<400> 2738

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cacccaggtt caaggcatag taattgcaat tttggttcgt tgcaccaatc atactgtagg 120

ggtctccctt atagtctttc tgtcaaaaag atggattttg acaccgcgcg cttccgtgac 180

cggttttctt cgcacaccag ccgtgcttcg agcagagttc tgaatgttgt acattgtagc 240

cagcgtatca catgccaaaa cctacttgtt tttgcatgaa tcttagcgta aaatcaatga 300

catatgactt tttcttgaaa tagatgtgca atacttagag cacatttaga tgtgctttag 360

caa 363

<210> 2739
<211> 284
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014d05b1

<400> 2739

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aggcttgcca tctcatacta cagactcttt ttttttacaa atccaaacta ctaacttttg 120

ttttactact tacctaagtt ttacttttta tattgataac cctttttttt tttaaacaca 180

tcaccaagtt agcgcccact gtctattgtc gaaatgcact aactactgaa cactatttgt 240

gtcaacctac actttaccac taatggatag acctccaacc taca 284

<210> 2740
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014d07b1

<400> 2740

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aggctttgcc attcaatact acagactgtt ttttttttaca aatccagacc tttactaact 120

ttctgttttt agctacttca cctaagcttc tactttctta tatgataacc ctttttttttt 180

tttaaacaca tccacccaag ataagcgcca cctatctatt agtcaaaatg cactaaactc 240

tgaaccttct tgtgtcaact acactttacc act 273

<210> 2741
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014d10b1

<400> 2741

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atgttttggt caacagattc gcagttgagt tctcggtaga ttgtttttgc tcatacaagt 120

cgatatgaaa tgtttgtaca aaaaccgggt ccgcgtgtac agtatgaaat gtcgtttgtg 180

cttcctttgg gtatgtcgcg gcactagtta agagttgctc ggtgcactgc actggttcgt 240

ccaaattatt actgatgtat agtacctcca aaaaaaaata accaccacgc ttatttggaa 300

ttagacctca caaacactca cggggtccgt tttc 334

<210> 2742
<211> 312
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsfl9316014e01b1

<400> 2742

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tttactagac ttcttctgct tctttagctg acttcaccta gagtcttcta ccttttgtta 120

tcatcgaatc aaccgattat tttgtttctt ttaaacacat cctaacccaa acgataagcg 180

cccacctagt cctatctagt acgaanaatg caaactagaa ctacatgaga cactatctct 240

gacgttacga acctaacact gtctaccaag cttattcgga ataagacctc acaaacactc 300

acaagttata ta 312

<210> 2743
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014e03b1

<400> 2743

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tcgcacatgc caccacttga gcgcgcaggc ccgaagcaac cgcacatggc tgtcgtggcc 180

gctgatcggg atgtcattca ccatcagtct gcctctgcgc cttaagttgc ggactgacag 240

ggccttgagt gcagccagcg acggttgaat ctgttcacgt gtccttcgtg aacggtctaa 300

ctgaagcaat gcaaacgtgg agcggaggcc ttcaagcatc acagcatgca gactgcacat 360

acccgagggt agccgcctag agttacacct aatgcatcga ttttcgtgct tgcgcgtcg 419

<210> 2744
<211> 319
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014e04b1

<400> 2744

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tgcttcgcag ctcacatatg acccagatac ccaattgagc tggacagttt ctaagcacgt 180

gaagcacaga ttcaactccg cctttacaaa ccggatagac attcgaggcg ctaagatgtc 240

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tatactgata tgtatatat 319

<210> 2745
<211> 311
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014e05b1

<400> 2745

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ctttactaga ctttttctgc ttctttagct gactctacct agagtcttct acctttttctt 120

atcattgaat caacccatgt tttttttttgt tttaaacaca tcccaaccca aagtataagc 180

gcccacctag tcctatctag tgcgaaaaat gcgaactaca actacatgag acactatgta 240

tgtcgttact aacctaacac tgtctaccaa gcttaatcgg aataagacct cacaaacact 300

cacaagttat a 311

<210> 2746
<211> 330
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014e06b1

<400> 2746

ttctccgaca ctcttacccg cagcctagnc ataatagcgt aacgcctcag agcaaagtca 60

ctgacggcgt tgcacatgag catacaagaa atgctgctgc tgctattcaa cgagatcgat 120

tctaacctcg aagcgcgcag atcccaatga cgagctcgtc gacgatgtcc accacgttgc 180

agtcgcgcca tgggccccga atgcgaaccc cgtctacatg gcctggtccg ttgtgccggt 240

actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct 300

tcagagcttc gccgtgaccc tgcaacaggt 330

<210> 2747
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014e07b1

<400> 2747

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tctgatttac aaatcccaac accactacta gagtttctct ggttcactag ctcactagac 120

ctagagcctt ctacatcatc tgatcatcgc aataacccct ttcttttatt ctcttacaca 180

catcccagc 189

<210> 2748
<211> 495
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316014e08b1

<400> 2748

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ctttacagat cccaaaacct ttactagact ttgtctgctt ctttagctta cttcacctag 120

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 180

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 240

tacatgagac actatctctg tcgttacgaa cctaacactn tctaccaagc ttaatcggaa 300

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 360

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 420

aataagaaaa tccaagtatt ttacgggatc catgagttca natttgatgc agacatgata 480

attaaagata gattc 495

<210> 2749
<211> 648
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsf19316014e10b1

<400> 2749

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

cacatgataa ttaaagatta gattcagggt caaattgata gggaatggat cagatcatga 600

cagtgtggtc gagtagagca atctaagcat cggtcagntn tttttttt 648

<210> 2750
<211> 560
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014e11b1

<400> 2750

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aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctgggcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggagc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggagttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg ctagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

cagggcagct ttaagcaccc 560

<210> 2751
<211> 471
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014f01b1

<400> 2751

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actctgtctt ttctttacaa atcccaaaac ctttactaga ctttttctgc ttctttagct 180

tacttcacct agagtcttct acctttttctt atcattgaat caaccccttt ttttttttct 240

tttaaacaca tcccaaccca aagtataagc gcccacctag tcctatctag tccgaaaaat 300

gcgaactaga actacatgag acactatctc tgtcgttacg aacctaacac tttctaccaa 360

gcttaatcgg aataagacct cacaaacact cacaagttat atagggcttg aaagaaagtc 420

taggtttggg tttgggttaa ctgctctaat aaggagagtc agctacttgg a 471

<210> 2752
<211> 529
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316014f05b1

<400> 2752

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacagatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gacagtctag 420

gtttgggttt gggtaactgc tctaatagga gagtcagcta cttggataaa aagagtgatc 480

aaaatgaata agacaatcca agtatgttac ggtatccatg agttcaaat 529

<210> 2753
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014f06b1

<400> 2753

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taagtcgggc tttgccattc atgctacaga ctttttttgt ttacaaatcc aaacctttac 120

tgacttttg tttttagcta cttacctaag ctttcctttt atcatgatac cctttttttc 180

tttacacatc acccaagtta gcgcccctat ctattgtcga aaatgcactg actactgaac 240

ctatttgtgt acac 254

<210> 2754
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014f09b1

<400> 2754

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catcaagaag ctgtgtgttt aacgagacat ttacctaagg ccaatccaat gcagctgtgc 120

atgccaccac gtgcatgccc tggcccaagc aaccccgcac tggctgtcgt ggcgtctgca 180

ccgactgtca tcaccatcag ttgcctctgt gccttaagtc gcgacctgac ggggccttaa 240

gtgcaccaca gcgagggatg gactgtccac gtgtctttcg tgaacggtcg aactgaagcg 300

atgcaacggt gaagcggagg acttaaggcc tcacagccca agcggcgtgc aatgacccag 360

aggtagcacg ctaggagttc aacctaatgc atcgcatgtt cgtgcttgcg cgatcgtcta 420

ctgcct 426

<210> 2755
<211> 456
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014f10b1

<400> 2755

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tccttgccag tatttttgtc gcaaaccctg caaagagaat aacaatgagg gagatcagga 120

accacccctg gttcttgaag aacttgccaa gagagctcac ggaagctgcc caagcaatgt 180

actacaagag agacaacagc gccccgacct actcggtcca gtccgtggag gagatcatga 240

agatcgtgga ggaggcgcag aaaccgcctc cttccaccac tccggtggcg ggtttcgggt 300

gggcggagga ggacgagcag gaggatggca agaagccaca ggaggaagcg gaggaggaag 360

accaggaaga tgagtatgag aagcacttga atgaggtccg tgccagcggt gagttccaca 420

tcacctagct gatgggggtg cttcactggc gtgaga 456

<210> 2756
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316014f12b1

<400> 2756

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acttgagcag ataaagaact ggtgctgatg ctgttcaacg agatcgattc taacctgaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacttggcag tcgcgccatg 180

ggccccgaat gcgaaccccg ccgacatggc ctggtccgtt gtgccggtac tgcgatcctg 240

cgacttgacc cattccacca tccagttctc gccctcctcg acggcgcttt agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtgcagc cacaggcgca gcggcattga 360

gatcctcgtc ctcgacggtg ctcccccttgc ggtagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggttgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgttt 525

<210> 2757
<211> 430
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g01b1

<400> 2757

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ttaagccggc tttgccattc atagctacag actcttttt tttcaatcca acctactaac 120

ttttgtttta ctacttacaa gttttacctt tttatattga taccctttt ttttttacac 180

atcaccaagt tacgccacta gtctattatc gaaagcaact aactctgaac acttttgtga 240

caacctcact ttaccactat cgatagacta caacctacag attgggtgaa gaagtagtgg 300

tgggaacgtt atagaagagt ctgataaaag gcaaagataa aatcagttta cgtctatcaa 360

ttggcactaa tagatatagt aatgtggagg taaatacggg cagtacacac tgtagttttt 420

taatatgttc 430

<210> 2758
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g03b1

<400> 2758

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agtcggcttt gccatctcat agtacagact ctttttttt caatcccaaa ccttctaact 120

tttgttttta ctactaccta agttttcctt ttttatatga taacctttt tttttaacac 180

atcacccaaa gatagcccca cctatctatt gtcgaaaagc actaactcta acacttttgt 240

gtcaacctaa cactttacac taacgataga ctcaacctac agattaggtg agaagctagt 300

ggttggtact gttaaaggaa gactcttgat aaaaggacaa gaaaaaatca tttacggtct 360

agtaatgtgc actaataaat aatagtaatg tggatgataa taacggtgca gaacattact 420

gtcatttttt tatat 435

<210> 2759
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g06b1

<400> 2759

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taagccagct ttgccatctc atagctacag actcttttt ttttcaatcc aacctttact 120

gacttttttgt tttagcttac ttacctaagt tttacctttt atattgatca ccccttttt 180

tttctttaaa cacatcaccc aagatagcgc ccctagtcta ttagtcgaaa tgcaactaac 240

tactgaacac tatttgtgtc aacctacact t 271

<210> 2760
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g07b1

<400> 2760

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ttaagccagc tttgccatct catactacag actttctttt ttacaaatcc aacctttact 120

aacttttgtt ttactactta cctaagtttt acttttttata tgataccccct ttttttttt 180

taaacacatc acccaagata acccccctat ctattatcga aatgcactaa ctctgaacac 240

ttttgtgaca acctaacatt ta 262

<210> 2761
<211> 650
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g10b1

<400> 2761

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat 600

gacagtgtgg tcgagtagag caatctaagc aatgttcagg ttttttttt 650

<210> 2762
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014g12b1

<400> 2762

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgccgacatg gcctggaccg gtgtgcccgt actgcgatcc 240

ggggacttga accattccac catccagttc tcgccctcct cgacggcgct ttagagcttc 300

gccgtgaccc tgtaacaggt ggccccttcg aagctgtgca tccacaggcg aatcggcatt 360

gagatcctcg tcctcgactg tgctcccctt gcgctagaca cggtgttcgt caacctgtag 420

agcgaattga caaaacggct ggagagcggt gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaagacgt tgacaacatg acgcccgaag agcgtttata cacggcgc 538

<210> 2763
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014h02b1

<400> 2763

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atgtcaccac tgcatgccag gcccgatgca ccccgcacat ggctgtcgtg gccgctgatc 180

gcactgtcat tcacatcatt tgcctctgtg ccttaagttg cggacctgca cagggcctta 240

agtgcaccca gcgagggatg aacctgtcca cgtgtccttc gtgacacggt tgaactgaga 300

gcatgcaacg gtgaagcggg agcctttaca agacatccag ccaagcagct tgcacatacc 360

cagaggtaga cgctaggagt tacactcaat gcatcggatg ttctgcttcg cgatcgtcta 420

ctgcgctacg 430

<210> 2764
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014h03b1

<400> 2764

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aagccgggct tgcctctcat agctacagac tctttttttt tcaatcaaaa cctactagac 120

tttctgtttt actactcact aagtctttac ctttctatat tgataaccct ttttttttt 180

taaacacatc acccaagata gcccacctat ctattatcaa aagcaactaa actctgaacc 240

tatctt 246

<210> 2765
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014h06b1

<400> 2765

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actcaagaag ctgtgtgttt aacggacatt tacctaagcg ccaatcaatg cagctcgcac 120

atgtcaccac tgcatgccct ggcccgaatg caccccgcac atggctgtcg tggccgctga 180

tccgactgtc attcaccatc agtctgcctc tgtgccttaa cttgcggacc tgccagggcc 240

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ggatgcaaac gtgaagggga gcctttcagg ccatcacagc catgcagact gcacatacgc 360

cagaggtagc cgcctaggag ttacacctaa tgcatcgcga tgtcgtgctt gccatcgtct 420

actgcct 427

<210> 2766
<211> 651
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316014h11b1

<400> 2766

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt cacattgata gggaatggta tcagatcatg 600

acagtgtggt cgagtagagc aatctaaggc atggtcagtt ttttttttt c 651

<210> 2767
<211> 623
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015a05b1

<400> 2767

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tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttcttt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ctcaaattga tagggaatgg tatcagatca tgacagtgtg 600

gtcgagtaga agcatctaag cat 623

<210> 2768
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015a07b1

<400> 2768

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atgctttctc atggaactcc aggcgcatgt tcagttcaaa tgagaaacat ctgcctgcaa 240

tatctgaccc gaaaattgag actgcattta aggatttgat ggctgctagc tggaacgagc 300

ttccaggttc tcttgtggag gaggcaaaga aagcagtatc tatggctact gatgataa 358

<210> 2769
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015a08b1

<400> 2769

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agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca gtcgcgccat 180

gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta ctgcgatccg 240

gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt cagagcttcg 300

ccgtgaccct gcaacaggtg gcccccttcga agctgtccag ccacagccgc agcggcattg 360

agatcctcgt cctcgacgtt gctccccttc cgctagacac ggtgttcgtc aacctggaga 420

gcgaattgac aaaacggctg gagagcggcg agggcacctt ttacaaggac catccgacaa 480

gccccaatgc caaggacgtt gccacatgac gcccgaggag c 521

<210> 2770
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015a09b1

<400> 2770

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taaaacctca caaacactca caggtaatat agggctggaa agaaagccta ggttggggtt 420

ggg 423

<210> 2771
<211> 575
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015a10b1

<400> 2771

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acattttaaa gccaagggtt tttgcccatc tccaatagct aacaagaact ctttctttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattcacgct caaattgata gggaa 575

<210> 2772
<211> 611
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015a11b1

<400> 2772

cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca 60

ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataatta 540

aagattagat tcaggttcaa attgataggg aatggtatca gatcatgaca agtgtggcga 600

gtagagcaat c 611

<210> 2773
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015b02b1

<400> 2773

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

cagggcagct ctcagcaccc tcaagattgt ccattccggc gat 583

<210> 2774
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015b06b1

<400> 2774

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

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cagggcagct ctcagcaccc tcaagattgt ccattccggc gat 583

<210> 2775
<211> 409
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015b07b1

<400> 2775

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggt 409

<210> 2776
<211> 639
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015b10b1

<400> 2776

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acattttaaa tccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattcaggtt caaattgata gggaatggta tcagaacatg acagtgtggt 600

cgagtagagc aatctaagct tggtcagttt ttttttttt 639

<210> 2777

<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015b11b1

<400> 2777

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaactga 480

ataaaaaaac ccagtttt 498

<210> 2778
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015b12b1

<400> 2778

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gtgttgaaca gatggggata ctatccactc attctaatag gatcatgggc attcggcact 120

attaaccgta tccatgattt catcgagcca gggcataaga tcttctggct ctcagatctt 180

gacgctggga cagctgcgct aatggtagca aacctatcaa ataaataagt tataaaattc 240

gccatagatc atctttgctc ttccaaagaa cacgttatga atgtcggatt gtgacgagat 300

aatcaattca attgcctatg ggttcaacag gtcagggcgt tgagcaat 348

<210> 2779
<211> 582
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015c01b1

<400> 2779

ttctccgacc tcttcccgca cctagcaaat ggtaagccaa gaaagccaac tgacggcatt 60

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

agggcagctc tcagcaccct caagattgtc cattccggcg at 582

<210> 2780
<211> 566
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015c02b1

<400> 2780

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

agggcagctc tcagcaccct caagat 566

<210> 2781
<211> 590
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015c05b1

<400> 2781

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggcatcca tgagttcaaa ttggatgcag acatgataat 540

taaagattag attcaggttc aaattgatag ggaatggtat cagatcatga 590

<210> 2782
<211> 609
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015c06b1

<400> 2782

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acattttaaa gccaagggct ttgcccatc tccaatagct aacaagaact ctttctttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattcaggtt caaattgata gggaatgtat cagatcatga cagtgtggtc 600

gagtagagc 609

<210> 2783
<211> 555
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015c09b1

<400> 2783

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagttcg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaacaat ccaagtattt tacggtattc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattc 555

<210> 2784
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015c12b1

<400> 2784

attataacct gatggtggtg ctagctgaac gtgaagagtt ggtgtgatga cacactggcg 60

tgataatggg ccttgggcgc cataggctat ctgccgagga atgcacgagg aaagatgagc 120

tgatcggcca tctccggtac ttgggtgaac aaccatacag tgatggccct cttacgggga 180

ccaaaaaaga actggcgcta ccc 203

<210> 2785
<211> 524
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316015d06b1

<400> 2785

ctcttcccgc acctagcaaa tggtgagcca agaaagccaa ctgacggcat tgcacatgag 60

cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgctaacc ccgtcgacat ggcctggacc gatgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatccagtt ctcgccctcc tcgtgggcgc ttcagagctt cgccgcgacc 300

ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc 360

gtcctcgacg ttgctaccct tacgctagac acggtgttcg tcaacctgga gagcgaattg 420

acaaaacggc tggagagccg cgagggcacc ttttacgagg accatncgac aagtcccaat 480

gccaaggacg ttgccaacat gacgcccgac gagcgtctaa ccac 524

<210> 2786
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316015d08b1

<400> 2786

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ttaagggttt ttgcccatct ccaatagctc acaagaactc tttcttttct ttacaaatcc 120

caaaaccttt actagactat ttctgcttct ttagcttact tcacctagag tctcctacct 180

tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac 300

tttctctgtc gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca 360

aacactcaca agttatatag ggcttgaaag aaagcttatg tctgggtttg ggttaactgc 420

tctaataaag agagacagct tcttggatt 449

<210> 2787
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015d09b1

<400> 2787

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acatgagcat acaaagaaat gctgctgctg ctattcaacg agatcgattc taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga 360

gatcctcgtt ctcgacgttg ctccccttc gctagacacg gtgttcgtca acctggagag 420

cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc attcgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cggctagcca cggcgctcaa 540

ggcagctttc agcaccctca agattgtcca ttccggcgat ttg 583

<210> 2788
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015d12b1

<400> 2788

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaaga 465

<210> 2789
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015e01b1

<400> 2789

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tgacggcatt gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat 120

tctaacctca aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc 180

agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt 240

actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct 300

tcagagcttc gccgtgaccc tgcaacaggt ggcccccttcg aagctgtgca gccacaggcg 360

caggggcatt gagatcctcg tcctcgacgg tgctaccctt gcgctagaca cggtgttcgt 420

caacctggag agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga 480

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cacggcgctc aggg 554

<210> 2790
<211> 564
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316015e02b1

<400> 2790

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

anggcagctc tcagcaccct caag 564

<210> 2791
<211> 549
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015e04b1

<400> 2791

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tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt atttagctta 180

cttcacctac agtcttctac ctgttcttat gatggagaca acccctttt tgatttcttt 240

taaacacatc ccaacccaaa gtatgagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

aaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt cgggctaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gaccaaaatg aattagaaaa tccaggtctt ttacggtgtc catgagctca aatttgatgc 540

acacatgat 549

<210> 2792
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015e07b1

<400> 2792

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tgctcatgag cttacaaaga aatgctgctg ctgctgttca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

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gagcgaattg acaaaacg 438

<210> 2793
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015e09b1

<400> 2793

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tgcacatgag ctttcaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cga 153

<210> 2794
<211> 651
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015f01b1

<400> 2794

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tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat 600

gacagtgtgg cgagtagagc aatctaagca ttggtcaggt ttttttttt t 651

<210> 2795
<211> 623
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015f02b1

<400> 2795

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

cacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

acaagtgtgg cgagtagagc aat 623

<210> 2796
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015f04b1

<400> 2796

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cgacgtacag ccttatcgac atcttcgaca tgctggcctc gtcgccggag taccggagca 180

tggcggaggc agttgaacgg ttcaatggcg ggaacaggtg gaagaagcgc ggcatttcgt 240

gcgtgcctga tcacctacga ggtgaccctc cggccgacgc cggggaaggt gtccatcctg 300

aacgaccgct cgatcgctgt ggtggtcggc tgcgtggagc tcgggcaatg gctgtatacc 360

aaggtgaagc agatgacgga gttcgggctg cgggagctct gtaccgacgc cgacgggctg 420

ctagacacgg tgcgcgtcat tgaggccgac acgctgagct tgat 464

<210> 2797
<211> 548
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015f05b1

<400> 2797

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actctgtctt ttctttacaa atcccaaaac ctttactaga ctctttctgc ttctttagct 180

tacttcacct acagtcgtct acctgttctt atgatcgaga caaccccttt attgatttct 240

tgtatacaca tcccaaccca acgtatgaac gcccacctcg tcctatctag gccgaaagat 300

gcaaactaga actacatgag acactatctc tggcggtacg aacctaacac ttcttaccaa 360

gcttaatcgg gataagacct cacatacact cacaagttat atagggcttg aaagaaagtc 420

taggttaggg ttcgggctaa ctgctctaat taggagagtc agctacttgg attaaaagga 480

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gcacacat 548

<210> 2798
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015f06b1

<400> 2798

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ctttcttttc ttacaaaatg ccaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttgtttta 240

aacacattcc aacccaaagt ataagcgccc acctagttct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gatacgaacc taacactttc taccaagctt 360

aataggaata agacctaaca aacactcaca agttatatag ggcttgaaag aaagcctagg 420

attgggtttg ggataactgc tctataa 447

<210> 2799
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015f07b1

<400> 2799

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtt cgaaaaaagc gaactagaac 300

tacctgagac actatctctg tgggtaccaa cctaacactt tctaccaagg ttaatcggaa 360

taagacctcc caaacactca caagttatat agggctttga aaaaaagact aaggttgggg 420

ttggggtaac tgctctaata aagagagtca gcttcttggg tttaaaagag ggagcc 476

<210> 2800
<211> 508
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015f08b1

<400> 2800

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agacgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtgggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctgccctt ccgatagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc tagggcacct tttacaagga ccatacgaca 480

agccccatgc caaggacgtt gcaacatg 508

<210> 2801
<211> 511
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316015f09b1

<400> 2801

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tgctcatgag cttacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

tgccgtgacc ctgcaacagg gtggcccttt cgaagctggt cagccacagc ncgcagggga 360

ttggagaacc tcgtcctcga cggtggtccc ttccggtaga cacggtggtc gtcaacctga 420

agagcgaatt gacaaaacgg ttggagagcc gcgagggccc tttttcaagg accattcgaa 480

cagccccatg ccaaggacgt tgccaacatg a 511

<210> 2802
<211> 561
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015f10b1

<400> 2802

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tgctcatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accattcgac 480

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cagggcagct tttagcaccc t 561

<210> 2803
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015f11b1

<400> 2803

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactt 337

<210> 2804
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015f12b1

<400> 2804

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta ctttacctag 180

agtcttctac cttttcttat cattggacca acccttttt tttttttt 228

<210> 2805
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015g01b1

<400> 2805

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acctcaaagc gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc 180

gcgccatggg ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg 240

cgatccggcg acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag 300

agcttcgccg tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc 360

ggcattgaga tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac 420

ctggagagcg aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat 480

ccgacaagcc ccaatgccaa ggacgttgcc aacttgacgc ccgaggagcg tctagccacg 540

gcgcttaggg cagc 554

<210> 2806
<211> 586
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316015g03b1

<400> 2806

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ctgacggcat tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga 120

ttctaacctc aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg 180

cagtcgcgcc atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg 240

tactgcgatc cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc 300

ttcagagctt cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc 360

gcagcggcat tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg 420

tcaacctgga gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg 480

accatccgac aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag 540

ccacggcgct canggcagct ctcagcaccc tcaagattgt ccattc 586

<210> 2807
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015g06b1

<400> 2807

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acctcaaagc gcccagatcc caatgacgag ctcgtcgacg atgtccacca cgttgcagtc 180

gcgccatggg ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg 240

cgatccggcg acttgtccca ttcgaccatc cagttctcgc cctcctcgtc ggcgcttcag 300

agcttcgccg tgaccctgca acaggtggcc ccttcgaagc tgtccagcca cagccgcagc 360

ggcattgaga tcctcgtcct cgacgttgct ccccttccgc tagacacggt gttcgtcaac 420

ctggagagcg aattgacaaa acggctggag agcggcgagg gcacctttta caaggaccat 480

ccgacaagcc ccaatgccaa ggacgttgcc aacatgacgc ccgaggagcg tctagccacg 540

gcgctcaggg cagctctcag caccctcaag attgtccatt ccg 583

<210> 2808
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015g08b1

<400> 2808

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gccatggccc gtaccaagca gaccggccgc aagttcaccg gcgggaaggc gccccgcaag 120

caggttgcca ccaaggggggg gaggaagtcg gggccgacca ccggcggagt gaagaagccc 180

caccgctaca ggccggggac cggggcgctt cgggagatcc gcaagtacca aaagagcacg 240

gagctgctga tccgcaagct gccttttcag cgcctgg 277

<210> 2809
<211> 590
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316015g09b1

<400> 2809

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatn tgatgcagac atgataatta 540

aagattagat tcaagttcaa attgataggg aatggtatca gatcatgaca 590

<210> 2810
<211> 642
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316015g10b1

<400> 2810

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

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tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

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tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatntgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gacagtgtgg 600

gcgagtagag caatctaagc atggttcaag tnttttttt tt 642

<210> 2811
<211> 602
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015g12b1

<400> 2811

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ctattaaccg tatccatgat ttcatcgagc cagggcataa gatcttctgg ctctcagttc 180

ttgacgttgg gacagctgca ctaatggtag caaacctatc aaataaataa gttataaaat 240

tcgccataga tcatctttgc tcttcccgag tcgatgttct gaatgttgta ttttcagggc 300

ttgttcaatt caatagccta tggtttcaac agctcagtgc gtcgagcaat ccatgagaga 360

ctggagctgt aagtcaccac cgatctcttt ggtttgctat attattccca ataatcaatg 420

aagcttgatt tttatgaaac ccttggtctg ctagattctt gccagaacgg ctatatcgat 480

ggcttccaag caatttcaga ccaaaaacca tctgatttta catcagcaac aacaacagcg 540

aagcgaaatg gtatcactca agaccgagga ccagcaatga cacttacttt caaactatac 600

at 602

<210> 2812
<211> 622

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015h01b1

<400> 2812

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tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatcca tgagttcaaa tttgatgcag 540

acatgataat taaagattag attcaggttc aaattgatag ggaatggtat cagatcatga 600

cagtgtggcg agtagagcaa tc 622

<210> 2813
<211> 561
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015h02b1

<400> 2813

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta g 561

<210> 2814
<211> 585
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015h05b1

<400> 2814

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taacctcaaa gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag 180

tcgcgccatg ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac 240

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gcggcattga gatcctcgtc ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca 420

acctggagag cgaattgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc 480

atccgacaag ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca 540

cggcgctcag ggcagctctc agcaccctca agattgtcca ttccg 585

<210> 2815
<211> 601
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316015h06b1

<400> 2815

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

a 601

<210> 2816
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316015h09b1

<400> 2816

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<210> 2817
<211> 178
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016a02b1

<400> 2817

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gctggtgatg ttcaccggga tcaattataa cctgatgggg ctcatagccc aacgacaagc 120

tctggggcgc atgccaccag ggtgcacatg ggccttgggc cccagaaggc taactgcg 178

<210> 2818
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016a05b1

<400> 2818

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accattcgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccga 519

<210> 2819
<211> 504
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016a09b1

<400> 2819

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tgagcagaca aagttatgct gctgctgcta ttcaacgaga tcgattctaa cctcaaagcg 120

cccagatccc aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc 180

cccgaatgcg aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga 240

cttgtcccat tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gcttcgccgt 300

gaccctgcaa caggtggccc cttcgaagct gttcagccac agccgcagcg gcattgagat 360

cctcgtcctc gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga 420

attgacaaaa cggctggaga gcggcgaggg caccttttac aaggaccatc cgacaagccc 480

caatgccagg acgttgccac atga 504

<210> 2820
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016a10b1

<400> 2820

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gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agc 523

<210> 2821
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016a11b1

<400> 2821

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accttgacta gactgtgtcc gctcaatttg gcttacttaa ggtactgtgt tgtccctgtt 180

tttatgatgg ggagaacccg tctaatgatg aattgtaagc acatctcagc tcactgggtg 240

agcacccacc tcgtgctatc tagctcgcag agagcaaact agaactgcat gtgacactgt 300

ctctgttgat acaagcctat cactacctac cagagcttaa ttggaatata gacctcacaa 360

acactcacaa gtgatatagg gctcgtgaga aagcctaagt tagggttcgg gctaactgct 420

ctaataatga gagctggctt cttggattaa aa 452

<210> 2822
<211> 615
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016a12b1

<400> 2822

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca tgacagtggg 600

gcgagtagag caatc 615

<210> 2823
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b01b1

<400> 2823

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cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttctttttct 120

ttacaaatcc ccaaaaccct tactaaaact tttctggttt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tcttaccaag cttaatcgga 360

ataagacct 369

<210> 2824
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b02b1

<400> 2824

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagaccttac aaaccctcac aagttatata gggctttgaa gaaagtctag gtttgggttt 420

ggggt 425

<210> 2825
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016b03b1

<400> 2825

acactttgtt acatctagcg gatttggatt tctttaacaa ctaaggttcc tgtttttaac 60

attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataggag agtcagctac ttggattaaa aagagggatc aaaatgaata 480

agagaatcca agtattttac tgtatccat 509

<210> 2826
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016b04b1

<400> 2826

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tttacacaaa cgacaagctt gactagactg tccatgatgc tgcagctgac gccagggcca 180

ggattgtaca cttttcgtat catggaactg acccgtgtgc cttgtctgtg aaacacatac 240

tagcccaaag tatacgcgcc cacctagtcc tatctagtgc gaataatgcg aactagaact 300

acatgagaca ctatgtctgt tggtacgaac ctaacacttt ctaccaagct tattcggact 360

aagacctcac aaacactcac atgttattta 390

<210> 2827
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b05b1

<400> 2827

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggttgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagccg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcg 525

<210> 2828
<211> 547
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016b06b1

<400> 2828

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gattanaaaa atccangtat tttacggtat ccatgagttc aaatttgatg ccgacatgat 540

aattaaa 547

<210> 2829
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b07b1

<400> 2829

taatatctaa caagaactgt ttctttttt tacaaatccc aaaaccttta ctagactttt 60

tctgcttctt tagcttacta cacctacaat cccctacctt tttttatgat tgaatcaagc 120

ccccttgttc attcccttta tacacatcct agcccaaagt ataagcgccc accgagatct 180

atctaccccg aaaaatgcta actagaacta cccgagacac tatctatgtt tgttaccacc 240

ctaac 245

<210> 2830
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b08b1

<400> 2830

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat 490

<210> 2831
<211> 638
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b09b1

<400> 2831

tcaacacttt gttacatcta gcggatttgg atttctttaa caactaaggt tcctgttttt 60

aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gacagtgtgg 600

tcgagtagag caatctaagc atggttcagt tttttttt 638

<210> 2832
<211> 616
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b10b1

<400> 2832

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca tgacagtgtg 600

gtcgagtaga gcaatc 616

<210> 2833
<211> 568
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016b11b1

<400> 2833

gtaatgccac gactgccgac tgtgggcatt gcacatgagc ggacaaggat atggtgctgc 60

tgctattcat cgcgagcgat tttaacctta ttgcgcccag atcccaacga cgagctagtc 120

tacgatgttc accacgttgc tgtagctcca tgggcccacc ttgcgatccc cgtggacatg 180

gcctggtccg ttgtgcctgt acatgcgatc cggcgacttg tcccattcga ccatccagtt 240

ctagctctcc tcgaaggcgc taaatagctc tgccgggacc atgctacagg tggtccctaa 300

caagctgctc agtcacaggc gtagtgggat tgagatccta gaactactcg ctggttctct 360

tgcgctagac acagagttca tgaacctgga gagcgaatcg gcaaaactgc tggaaagcgg 420

ctacggcacc ttttacgagg gccatacgtc aagccccaat gccaaggacg ttgccgacat 480

gacgacctca gaggtgctag ccacgtggct catggcgatt atatgcaccc tcaaaattgt 540

ccattccgcg atttgtttca ctgctttg 568

<210> 2834
<211> 607
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016b12b1

<400> 2834

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atntgatgca gacatgataa 540

ttaaagatta gattcacgtt caaattgata gggaatggta ttagatcatg acagtgtggt 600

cgagtag 607

<210> 2835
<211> 131
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c01b1

<400> 2835

gcacagtgcg aatgctttaa caacttaatg ccgctgccct aaacactggg tatttcacgg 60

ctatcgccca ctgcgtcact aagaagaact ctgtctcttt tttgctgatg gatgaccctg 120

actagacttt g 131

<210> 2836
<211> 640
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016c02b1

<400> 2836

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acattttaaa gtcaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata ggggcttgaa agaaagtcta ngtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aaattgatgc agacatgata 540

attaaagatt agattaggtt caaattgata gggaatggta tcagatcatg acagtgtggt 600

cgagtagagc aatctaagca ttgttcagnt ttttttttt 640

<210> 2837
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c03b1

<400> 2837

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ttttttccat ccccaccata ttatcaccgc aaaaatggtg gaccacggta tatcctcaca 120

gctactccta tcacacaggt tatcatagag ccattcaaac agagataccg aaaacgaacc 180

cctgctgcct ccttcgcggc acaaatctga cccaaatccc caattgagct ggacagtctc 240

taagcacgtg aagcacagat tcaactccac ctttacaaac ctgagacaca ttcgaggcgc 300

taagatgtct tcgatgccgt tcctcatctg tcataactat gtccagattg gatatatata 360

ttgtctggct atacttatat ttatatatat ttggcctgaa tataactatt acttttgatt 420

atttgttaaa catgtccatg gattt 445

<210> 2838
<211> 615
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c05b1

<400> 2838

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acatttttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg acagtgtggg 600

cgagtagagc aatct 615

<210> 2839
<211> 639
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c06b1

<400> 2839

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttcttt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca tgacagtgtg 600

gtcgagtaga gcaatctaaa gcatggtcag gttttttt 639

<210> 2840
<211> 650
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c07b1

<400> 2840

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tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg acagtgtggt 600

cgagtagagc aatctaagca tggtcacgtt ttttttttt aaatcattgc 650

<210> 2841
<211> 556
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c08b1

<400> 2841

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tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagacaat ccaagtattt tacgggatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gattca 556

<210> 2842
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c09b1

<400> 2842

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ctttttttt ttactcaaac acaccccaac ccaaagcatc cgcgccgcac ctatctacta 180

tctaggccga aaaatgcgaa ctacaactac atgtagacac tattgttgta gccacaaacc 240

taacactgtg caccaaggtg aatcggccta agacctcaca aacacttaca agggat 296

<210> 2843
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c10b1

<400> 2843

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tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

ggcttcttac cttttcttat cattgaatca accccttctt gtttttcttt taaacacatc 240

ccaacccaaa gtttaatcgc ccacctagtg ctatctagtg cgaaaaaggc gaactcgaac 300

tacgtgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctta caaacactca caagttatat agggctggaa agaaagtcta ggttcgggtc 420

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aataagaaaa tcccagtatt ttacggcatc catga 515

<210> 2844
<211> 508
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016c11b1

<400> 2844

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cagaccccaa tgacgagctc tgctacaatg tccaccactt tgcagttgcg ccatgggccc 180

cgtatgcaga accccgtcga catggactgg tccgttgtgc cggttctgcg atccggcgac 240

tagtcccatt cgaccatgca gatctagccc tacttgaggg cgcttcagag atttggcgcg 300

accctgcgac actgtggtcc cttggaagct gtccagccac agccgcagcg gtattgagat 360

cctcgtcctc gacgatgctc ccctttcgct tgacactgtg ttccgacaac ctggagaggg 420

aattgacaaa acggctggag agtggggagg gcacctttta caaggaccat accggcaagc 480

cccaatgcct aggacgttgc cacatgac 508

<210> 2845
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016d02b1

<400> 2845

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tgcacatgag cttacaaaga aatgctgctg gtgctattca acgagatcga ttctaacctg 120

aaggcgccca tagccgaacg acaagctcgt ctgcgatgta caccaggttg ctaatgggcc 180

atgggccccg aatgcgaact ccggacgaca tgcgcctgct aacgatgagc ctgaactgcc 240

atccgccgac ttgggctata caaccataca gtgctggccc tcctcggggg agctaaaaag 300

atctgccgcg accctgcagc aagtggcccc ttgaaagctg tgcacaccac ggcctgagct 360

ggattgagat cctcgttctc gacgttgctg ctgttgcgat agacacggtg tccatcaacc 420

tggagagcga attgacaaaa ctgttggaga gcggcgaggt caccttttag aaggaccata 480

cgagaagtcc caatgccaag gacgtttcca acatg 515

<210> 2846
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016d03b1

<400> 2846

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tttttaacat tttaaatcca agggcttttg cccatctcca atagctaaca agaactcttt 120

cttttcttta caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttttt tcttttaaac 240

acatcccagc ccaaagtata agcgcccacc tagtcctatc tagtccgcga aatgcgacct 300

cgagctacac tatacattat ctctgtcgtt acgaacctaa cactttctac caagcttaat 360

cggaataaga cctcacaaac actcacaagt tgtttgaggc tagaaagaga gtcgtggttg 420

gggtactgct ataatgctga gagacagcta cttggattct tgggtgtgat cgagtggtct 480

aagagaa 487

<210> 2847
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016d04b1

<400> 2847

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gcacatgagc agacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

agccccaatg ccaaggacgt tgccaacatg acgcccgagg agcgtctagc cacggcgctc 540

agggcagctc 550

<210> 2848
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016d05b1

<400> 2848

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

c 541

<210> 2849
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016d06b1

<400> 2849

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

c 541

<210> 2850
<211> 593
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016d10b1

<400> 2850

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

gggtaactgc tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa 480

taagaaaatc caagtatttt acggtttcca tgagttcaaa tttgatgcag acatgataat 540

taaagattag attcaagtcc aattgatagg gaatggttca gatcatgaca gtg 593

<210> 2851
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e01b1

<400> 2851

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

gcccaaagaa taagccccca cctagtccta tctagtgcga aaaatgcgac ctagaactac 300

atgagacact atctctgtgg gtacgaacct accactttct accaagctta atgggcataa 360

gacctcacaa acactctcag gttatcttgg gcttgaaaga aagactaggt ttgggtttgg 420

gttaactgct ctaataagga gagtaactta ctgggattaa 460

<210> 2852
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e02b1

<400> 2852

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgacggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcctcttcg aagctgttca gccacaggcg cagcggcatt 360

gagatcctcg gcctcgacgt tggtcc 386

<210> 2853
<211> 597
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016e03b1

<400> 2853

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ttactgcatc ttttcttcca cccccaccat attatcaccg caaaaatggt ggaccacggt 120

atatcctcac agctactcct atcacacagg ttatcataga gccattcaaa cagagatttc 180

gaaaagaacc cctgctgcct ccttcgcggc acaaatctga cccaaatccc caattgagct 240

ggacagtctc taagcacgtg aagcacagat tcaactccac ctttacaaac ctgagacaca 300

ttcgaggcgc taagatgtct tcgatgccgt tcctcatctg tcataactat gtccagtttg 360

gttatatata ttttctgttt atacttatat ttatatatat ttttcctaaa tataactatt 420

acttttgatt atttgttaaa catgtccatg gatttaactc aatctcaata aatgcttctt 480

agtcttgtgt ctctctatca taatttgntg gtgaataaca tttttattta ccattgtaaa 540

anaaaaaact tgaaaattgc gtaaaatcat tggaactctt cttttctttt ctttttg 597

<210> 2854
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e05b1

<400> 2854

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ctgtcattaa cattctaaag tcaacggctg ttgcccatct acaatgatct aacactgaac 120

ctctattgtt tccctttaca caaacgacaa gctttactag actgtccatg atgttgtagc 180

ttactcaagc tccaggattg taccctctgt tatcatggac tgaaccgctg tgtcttttct 240

gttaaaacac agacctagcc cataggatca gcgagcacct agccttatct agtgcgctaa 300

ataggaacta caactacatg agacactgtg tctgtc 336

<210> 2855
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e06b1

<400> 2855

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tccgcctcgt ccatcgacgg cggggaccac ctgcagcttg gcctcctctc cggcggcgct 180

ggccgcgggg agtgcacggg caccgcggcc gagtgccgcg gggaggacgc ggaggggggag 240

ctcgggtcgg cgtctgacga ggcgcaccgc cgcgtgctgc aggggcgcgg ctacatcagc 300

taccgcgcgc tgcgcagggg caccgtaccc tgcaaccgtc gcggcgccag ctactacaac 360

t 361

<210> 2856
<211> 651
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e08b1

<400> 2856

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagaata gattcaggtt caaattgata gggaatggta tcagatcatg 600

acagtgtggt cgaggagagc aatctaagca ttgttcagtt ttttttttt t 651

<210> 2857
<211> 649

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016e09b1

<400> 2857

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaanagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

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<210> 2858
<211> 554
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016e10b1

<400> 2858

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tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcanaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacatgata atta 554

<210> 2859
<211> 603
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e11b1

<400> 2859

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tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagttct 180

tgacgttggg acagctgcac taatggtagc aaacctatca aataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagtgcg tcgagcaatc catgagagac 360

tggagctgta agtcaccacc gatctctttg gtttgctata ttattcccaa taatcaatga 420

agcttgattt ttatgaaacc cttggtctgc tagattcttg ccagaacggc tatatcgatg 480

gctttcaagc aatttcagac caaaaaacca tctgattcta catcagtcac aacaacagcg 540

aagcgaaatg gtatcactca agagcgagga ccaacaatga cactaacttt tcaactatac 600

att 603

<210> 2860
<211> 506
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016e12b1

<400> 2860

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tcttctctta tttacaaatc ccataccta cactagacgc tttttgctct tatagctcac 180

ttaacctaga gccttctacc attattgatc atagcatcaa ccccttttt ttttactca 240

aaacacatcc cagcctaaag gctcagctcc cacctagtac tatctagtcc gcaaactgcg 300

acctcgagct acactataca ctatgtttcg aagctaccaa ctctaacact ttctaccatg 360

cttaatgagc ataagacctc tcacacactc tcaaggtata tagggctaga aagaaagtgt 420

aggtttggga actggtttac tgctgtgaga aagagacgtg gatacttgga gtgaacagag 480

tgatcaagat gaatcagaaa tttcac 506

<210> 2861
<211> 409
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316016f02b1

<400> 2861

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacactnt ctaccaagct 360

taatcggaat aagacctcac aaacactcac angttatata gggcttgaa 409

<210> 2862
<211> 556
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016f03b1

<400> 2862

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tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattag aaagagtgat caaaatgaat 480

cagaaaatcc aggttttcta cgggttccat gaggtcaatt ttgtgcagac atgatattta 540

agatttcatt cggttc 556

<210> 2863
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f04b1

<400> 2863

gcgtctaaag ctaacacttt gttcatctag cggatttgga tttctttaac aactaaggtt 60

cctgttttta acattttaaa gccaagggct tttgcccatc tccaatggct aacaagaact 120

ctttcttttc tttacaaatc ccacaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttgtacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtgc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

tagtcggaat aagacctcac aaacactcac aagttatata gggc 404

<210> 2864
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f05b1

<400> 2864

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tctaaccttg atgcgcccac atcccaatga cgagctcgtc caccatgtcc accacgttgc 180

attcgcgcca tgggccccta atgcgaaccc cgtcaacatg gcctggaacg ttgtgccggt 240

actgcgatcc ggcgactaga accattcgca ccatccagtt ctcgccctcc tcgaaagagc 300

tacagagctt ccccgtgacc ctgctacagg aggcccctgt gagctgatca ctcacagtcg 360

cagtggcctt gagatcctac ggctcgacgt tgctcccctt gcgctagaca cagtgttcgt 420

caatctggag agcgaatcga ctaaacggtt ggag 454

<210> 2865
<211> 530
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f07b1

<400> 2865

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tgcacatgag catacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgaa gagcgtctag 530

<210> 2866
<211> 647
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f10b1

<400> 2866

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cctgtttttа acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt tttttctttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa aattgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

acagtgtggc gagtagagca atctaagcat gttcagtttt ttttttt 647

<210> 2867
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f11b1

<400> 2867

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tgtttttaac attttaaagc caagggcttt tgcccatctt caatagctaa caagaactct 120

ttctttttctt tacaaatccc aaaaccttta ctagactttt tctgcttttt tagcttactt 180

cacctagagt cttctacctt ttcttatcat tgaatcaacc ccttttttt tttctttaa 240

acacatccca acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa 300

ctagaactac atgagacact atctctgtcg ttacgaacct aacactttct accaagctta 360

atcggaataa gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt 420

ttgggttcgg gttaactgct ctaataagga gagtcagcta cttggattag aacgagtgat 480

caaaatgaat cagagaatcc acgtgtttta cggaatccat gagttcgaat ttgatgcaga 540

catgataatt aaagattaga ttc 563

<210> 2868
<211> 601
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016f12b1

<400> 2868

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

a 601

<210> 2869
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g02b1

<400> 2869

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatg 529

<210> 2870

<211> 610
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g03b1

<400> 2870

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttcaggttca aattgatagg ggaatgtatc agatcatgac agtgtggcga 600

gtagagcaat 610

<210> 2871
<211> 625
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g04b1

<400> 2871

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cctgttttta acattttaaa gccaagggct ttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

accgtgtggt cgagtagagc aatct 625

<210> 2872
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016g05b1

<400> 2872

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gaacggcctg gtgtcgacat acttcgtgaa tggcagcagt attcacatct agcagcatgg 180

cagcagacca gtttttttttc ttttcctgca tgtgttattc ttttcttttt tattttcttt 240

agtatggatc tatctctctg atcaagcaag aagagatcgg cagcttcagc gacatgacga 300

gccgtttccg ggtttttatg aagggaacta tttggggtcg cgcggaagca aaactagcta 360

gggtttatta gggcttgctc tagggccgct tgctattcct 400

<210> 2873
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016g06b1

<400> 2873

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attttaaagt caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatcct aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctttgtcg ttacgaacct aacacttttt accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatattag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagccagct acttgggtta aaaagaggga tcaaaatgaa 480

gtagaaaatc caagcttttt acggtattca tgagttcaaa tttgatgctc accggataat 540

taaag 545

<210> 2874
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g08b1

<400> 2874

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ttaaccgcat ccatgatttt attgagcgca gggcttaaga tcttctggct ctcacttctt 180

gactttggga cagttgaact aatggtagca cacctttcaa ataaataagt tataaaattc 240

agcatagatc atctccgctc tttccgagtc tgatgatctg aatgatgtgt tctcagggct 300

agatcaatta atatcctatg gcttcacacc tcaacgcgtc tagcaatcca tgagagactg 360

gagcctgcta cacaccaccg agctctttgg gtggctgtat tattcccaat tatcgataga 420

aggcttgatt gttttgaaac cg 442

<210> 2875
<211> 530
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g09b1

<400> 2875

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tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg tttgccacat gacgcccgag gagcgtctag 530

<210> 2876
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016g10b1

<400> 2876

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agagttaagg gcatttgcac atcttcaata ggaaacaaga actttttttt ctaatttaca 120

aaacctaaaa cctacactag acgctttttg atcctacagc atactaaacc tagagtcttt 180

taccattatt gaacaaagaa tcaacccttt ttttttaaa ctcaaaacac atcccagcct 240

aaagggtcag ctaccactaa gtactatgaa aaacgaaaac tgcgaccaag agctacatta 300

tacattatgt ttcgaagcta aaacttaata ctaagcacca aggtaaaaag gagataagaa 360

ctctcacacg cttacaagg 379

<210> 2877
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h01b1

<400> 2877

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tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagttct 180

tgacgttggg acagctgcac taatggtagc aaacctatca aataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagtgcg tctgagcaat ccatgagaga 360

ctggagctgt aagtcaccac cgatctcttt gggttgctat attattccca ataatcaatg 420

aagcttgatt tttatgaaac ccttggtctg ctagattctt gccagaacgg ctatatcgat 480

<210> 2878
<211> 639
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316016h02b1

<400> 2878

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ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ntacggtatc catgagttca aatttgatgc agacatgant 540

attaaagaat agattcaggt tcaaattgat agggatggta tcagatcatg acagtgtggc 600

gagtagagca atctaagcat tgggtcagtt ttttttttt 639

<210> 2879
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h03b1

<400> 2879

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tttttaacat tttaaagcca agggcttttg cccatctcca atagctaaca agaactcttt 120

cttttcttta caaatcccaa aacctttact agacttttttc tgcttcttta gcttacttca 180

cctagagtct tctacctttt cttatcattg aatcaacccc ttttttttt tcttttaaac 240

acatcccaac ccaaagtata agcgcccacc tagtcctatc tagtccgcaa aatgcgacct 300

cgagctacat tatacatgtt gttt 324

<210> 2880
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h04b1

<400> 2880

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataaggaaaa tcccagtatt tacgggcttc catgaggtca aatttggtgc 540

agacatgata attaaagatt aga 563

<210> 2881
<211> 649
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h05b1

<400> 2881

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtc aaattgatag ggaatggtat cagatcatga 600

cagtggggcg agtagagcaa tctaagcatt gttcagtttt tttttttttt 649

<210> 2882
<211> 601
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h06b1

<400> 2882

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ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

a 601

<210> 2883
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h07b1

<400> 2883

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccac 534

<210> 2884
<211> 660
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316016h08b1

<400> 2884

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cctgttttta acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact 120

ctttcttttc tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac 180

ttcacctaga gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt 240

aaacacatcc caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg 300

aactagaact acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct 360

taatcggaat aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag 420

gtttgggttt gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg 480

atcaaaatga ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca 540

gacatgataa ttaaagatta gattcaggtt caaattgata gggaatggta tcagatcatg 600

acagtgggtc gagtagagca atctaagcat tgggtcagtt tttttttttc aaatcattgc 660

<210> 2885
<211> 559

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316016h10b1

<400> 2885

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc 540

agacctgata attaaagat 559

<210> 2886
<211> 543
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316017a02b1

<400> 2886

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acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tgggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggcttggg 420

ataactgctc taataaggag agtcagctac ttggattaaa aagagtgatc agaatgaata 480

agaaaatcca agcattttac ggtatccatg agttcaaatt tgatgcanac atgataatta 540

aag 543

<210> 2887
<211> 505
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316017a03b1

<400> 2887

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tgaaagattg gttgcggttc agcgtggcct tttggcatac gttccggggt actggaggag 120

acccttttgg tgcagccaca aagaactggc cttgggagga tggcaccaat tccttggcca 180

tggctaagag aagaatgaaa gctcacttcg agttcatgga gaagcttgga gttgagaggc 240

ggtgcttcca tgacagggac atcgcccctg atggcaaaac actcgcggaa acaaatgcta 300

acttggatga gatagttgag ctggcaaagc aactccagag tgagaccaat ataaagccat 360

tgtgggggac tgcacagctt ttcatgcatc cacgttacat gcacggagct gctactagcc 420

cagaggtcaa ggtgtatgct tatgctgctg ctcaagtgaa gaaagctttg gaggttactc 480

actacctagg cggngagaac tatgt 505

<210> 2888
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017a04b1

<400> 2888

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tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacagc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagc 524

<210> 2889
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017a05b1

<400> 2889

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ttacaaatcc caaaaccttt actagacttt tactgcttct ttagcttact tcacctagag 180

acttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctcttgt gttactaacc ttacactttt taccatgctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgtaag aaagtctagg attgggtttg 420

ggttaactgc tctaatagga gagtcagcta cttggattta caagagtgat caagatggat 480

cagaaaatcc aagtatttta 500

<210> 2890
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017a06b1

<400> 2890

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gagcccagcc acaaccgaca cgcgacttta ccaggttcac cagcttactt tagctccagg 180

ggcccacctt gcgatctcag tggaccaggc ccgtttcgtt gtgcctgaac cgcatccagc 240

cacattgtat catgcgccca cccagttcta tctctcccga aaagtgctaa ctagatctac 300

ctgaaacact atacatgtgg ccactaacct aacagtcagt accaggctta atgggaatga 360

gaccctacaa ccactcacag gttc 384

<210> 2891
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017a07b1

<400> 2891

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atga 534

<210> 2892
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017a09b1

<400> 2892

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ttagatggtt ggaccaattt gctttatccc tggatccaga tactgcaatg tctttccatg 120

atgaaacatt accatctgat ggtgctaaag tagcacattt ctgctctatg tgtggtccca 180

agttttgttc gatgaaaatc acggaggata ttaggaaata tgccgatgaa catggttacg 240

ggacagtaga agaagctgtg aggcaaggaa tgagtgagat gagtgctgaa tttttggcag 300

caagaaaaac aattagtggc gaacaacatg gtgaagctgg aggggaaatc tatgtgccat 360

aaagct 366

<210> 2893
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017a12b1

<400> 2893

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tctccacttc cacccccacc atattatcac cgcaaaaatg gtggaccacg gtatatcctc 120

acagctactc ctatcacaca ggttatcata gagccattca aacagagatt tcgaaaagaa 180

cccctgctgc ctccttcgcg gcacaaatct gacccaaatc cccaattgag ctggacagtc 240

tctaagcacg tgaagcacag attcaactcc acctttacaa acctgagaca cattcgaggc 300

gctaagatgt cttcgatgcc gttcctcatc tgtcataact atgtccagtt tggatatata 360

tattttctgt ttatacttat atttatatat atttttccta aatataacta ttacttttga 420

ttatttgtta aacatgtcca tggatttaac tcaatctcaa taaatgcttc ttagtcttgt 480

gtctctttat cataatttgg tggtgaataa atttttttatt taccatttg 529

<210> 2894
<211> 621
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017b02b1

<400> 2894

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taacatttta aagccaaggg cttttgccca tctccaatag ctaacaagaa ctctttcttt 120

tctttacaaa tcccaaaacc tttactagac tttttctgct tctttagctt acttcaccta 180

gagtcttcta ccttttctta tcattgaatc aacccctttt ttttttttctt ttaaacacat 240

cccaacccaa agtataagcg cccacctagt cctatctagt ccgaaaaatg cgaactagaa 300

ctacatgaga cactatctct gtcgttacga acctaacact ttctaccaag cttaatcgga 360

ataagacctc acaaacactc acaagttata tagggcttga aagaaagtct aggtttgggt 420

ttgggttaac tgctctaata aggagagtca gctacttgga ttaaaaagag tgatcaaaat 480

gaataagaaa atccaagtat tttacggtat ccatgagttc aaatttgatg cagacatgat 540

aattaaagat tagattcagg ttcaaattga tagggaatgg tatcagatca tgacaggtgg 600

tcgagtagag caatctaagc a 621

<210> 2895
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017b04b1

<400> 2895

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tatcccaatg acgagctcgt agtcgatgtt caccaggttg caagcgcgcc atgggtccag 180

aatgctaacc ccgtttacat gggctggaac gctgtgcctg ttctgtgatc cggacgactt 240

gaaccattcg accatgcagt tatctagctc cttgtaggcg cttaagagct tcgctcggac 300

cctgtgacag gctgcccctt cgaagacgaa catacacatt cgtagcggga ttgagagcct 360

tgtgatctac gatgctctca ttaggcttga cacggtggcg agaacctgta gagcgaattg 420

acagaacagt tggatagcga ggagggcacc ttttacgggg tccatccagc gagccccaat 480

gccaagga 488

<210> 2896
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017b06b1

<400> 2896

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cattgcacat gagcagacaa agaaatgctg ctgctgctat tcaacgagat cgattctaac 120

ctcaaagcgc ccagatccca atgacgagct cgtcgacgat gtccaccacg ttgcagtcgc 180

gccatgggcc ccgaatgcga accccgtcga catggcctgg tccgttgtgc cggtactgcg 240

atcccgggac ttgtcccatt cgaccatcca gttctcgccc tcctcgtcgg cgcttaaaag 300

cttggccggg accttgcacc agggggcccc ttcgaagttg tccagcccca gccgaagggg 360

aattgaaacc ctggtcctga cggtggttcc ct 392

<210> 2897
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017b07b1

<400> 2897

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ctaacctcaa agcgcccaga tcccaatgac gagctcgtcg acgatgtcca ccacgttgca 180

gtcgcgccat gggccccgaa tgcgaacccc gtcgacatgg cctggtccgt tgtgccggta 240

ctgcgatccg gcgacttgtc ccattcgacc atccagttct cgccctcctc gtcggcgctt 300

cagagcttcg ccgtgaccct gcaacagggt ggccccttcg aagctgtcca gccacagccg 360

cagcggcatt gagat 375

<210> 2898
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017b10b1

<400> 2898

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ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt tattttcttt 120

acaaatccca aaacctttac tagactttgt ctgcttcttt agcttacttc acctagaggc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagggcccac ctagtgctat ctagtgcgaa aaatgcgaac tcgaactaca 300

tgagacacta tctctgtggt tacgaaccta acactctcta ccaagcttaa tcggaataag 360

agcttacaaa cactcacaag ttatataggg ctggaaagaa agtctaggtc tgggcttgg 419

<210> 2899
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017b11b1

<400> 2899

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag ga 522

<210> 2900
<211> 642
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c01b1

<400> 2900

gcacctaaca ctttgttaca tctagcggat ttggatttct ttaacaacta aggttcctgt 60

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ttttctttac aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac 180

ctagagtctt ctacctttttc ttatcattga atcaacccct ttttttttttt cttttaaaca 240

catcccaacc caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta 300

gaactacatg agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc 360

ggaataagac ctcacaaaca ctcacaagtt atatagggct tgaaagaaag tctaggtttg 420

ggtttgggtt aactgctcta ataaggagag tcagctactt ggattaaaaa gagtgatcaa 480

aatgaataag aaaatccaag tattttacgg tatccatgag ttcaaatttg atgcagacat 540

gataattaaa gattagattc aggttcaaat tgatagggaa tggtattaga tcatgacagt 600

gtggtcgagt agagcaatct aagcatggtt caagtttttt tt 642

<210> 2901
<211> 582
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c02b1

<400> 2901

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agacaaagaa atgctggtgc tgctattcaa cgagatcgat tctaacctta aagcgcccat 120

atcccaatga cgagctcgtt agacgatgtc caccaggttg caggcgcgcc atgggccccg 180

aatgcgaacc ccgtctacat gggctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatgcagtt ctcgccctcc tatgtggcgc ttcagagctt agccgtgacc 300

ctgcaacagg tggccccttc gaagctgaac agccacagcc gcagcgggat tgagatgctt 360

gtgctcgacg ttgctccccc tccgctagac acggtgttcg tgaacctgga gagcgaattg 420

acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatacgac aagccccaat 480

gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct cagggcagct 540

ctcagcaccc tcaagattgt ccattccggc gatttgtttt cg 582

<210> 2902
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c04b1

<400> 2902

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ttgcggctgc ctggactacc ctgatgagtg cttgttcagc caactggcct agagtggccc 180

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gctgtttctg gtggtacaaa cctaacactg tctacgatga ctcatgggct taagacgtca 360

ctggccctca caagtcatct aggggtcgga agaaagccta gggttgggca agggataact 420

<210> 2903
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017c07b1

<400> 2903

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ctgttcaagg agatcccatg tttcattcaa gcgcgctgat gctaatgact aactcttgat 120

agatgttgac cacacaactg gcgtaataat ggcccttaag ggccactgtg tctatgtgga 180

cgagtccatt acgaaagatc tgctgattgg ccacttgcgc tatttgagcg tacaactgta 240

cccctatttg agggctgttg agaacaaaga agaaccgtgg ctcagggtgg cccatctgaa 300

ataggcactc gcagacacaa gg 322

<210> 2904
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017c08b1

<400> 2904

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tgtcatggta agaagaaacc ttgataagga gaggaacaag aatgttggtt aatactactc 120

ccttaacatg gctggatttg tgcaggagaa agcctatgaa agtgtgcggt ttcttgccga 180

gaaacacaag agagagaacg acgccgctct gatcaaaatc ttgctgttag agaagcagct 240

cgatgagaag catcagctgg agctggatat tcaacatctt aaaggcaagc ttgaggtggt 300

gaatcacatg gagggagagg gcgtctatgt gaagaaacgt actgaagagc tgaacaagga 360

tctacaggat agaattgact caatggaaga cctggaagag ctaaatcaag ctctgattat 420

caaggatagg atgaccaatg atgaactgca ggatgcaaag aaagagctta tttcgggctt 480

ggtggatctg ctgggccc 498

<210> 2905
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c09b1

<400> 2905

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gctggctgac cctgccgaat gactagctct tcaactaggt ccaccatggt gctttcgggc 120

cattggccct ctatggaagc ccccatgaca tgggctgaac cgtttggccg gctctgctat 180

ctgggtaaac agactgattc gaccattcag tcttagcgct actaatgagg acctgagagt 240

tcttgcggga cccttgaaca agggg 265

<210> 2906
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c10b1

<400> 2906

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ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca tacactcaca agttatatag ggcttgaaag aaagtctagg cttgggtttg 420

ggttaactgc tctaataagg agaggcagct tctgggttaa aaagagggtc caaa 474

<210> 2907
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017c12b1

<400> 2907

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ccagatccca atgacgagct cgactacgat gtccaccacg ttgtcagtta cgccatgggc 180

cccgtatgcg aaccccgtat acatggactg gtccgttgtg cctgttctgt tatccggcta 240

cttgtcccat tcgaccatcc agatctagcc ctactctttg gcgcttaaga gcatctccga 300

gaccctgcaa ca 312

<210> 2908
<211> 519
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d01b1

<400> 2908

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagaga 180

cttctacctt ttcttatcat tgaatcaacc cctttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgttg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaaga ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaa 519

<210> 2909
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d04b1

<400> 2909

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gctggaggct cccatccaat acaacggcat ggactacgta ttgctctacc ctcacactgg 120

ataggagacc tccatggaca aacgactgaa aaacatgcta tacgtgctca cggacatgat 180

caccataatg gatctatcct acatgcactt caggtatcca cgaatgaggc tacatgaggc 240

tactgcccag gagcaggact ctggaaatga ggaacgaaga tgcaccagcg agggttggct 300

tccca 305

<210> 2910
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d05b1

<400> 2910

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ctgacaaaga aatgctggtg ctgctattca acgagatcga ttctaacctc aaagcgccca 120

gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg 180

aatgcgaacc ccgtcgacat gggctggtcc gttgtgccgg tactgcgatc cggcgacttg 240

tcccattcga ccatgcagtt ctcgccctcc ttgtcggcgc ttcagagctt cgccgagacc 300

ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctt 360

gtgctcgacg ttgctccccc tacgctagac acggtgtgcg tcaacctgga gagcgaattg 420

acaaaacagc tggagagcgg cgagggcacc ttttacaggg accatccgac gagccccaat 480

gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct cagggcagct 540

ctcagcaccc tca 553

<210> 2911
<211> 583
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d06b1

<400> 2911

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatgcgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

catggcagct ctcagcaccc tcaagattgt ccattccggc gat 583

<210> 2912
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d07b1

<400> 2912

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ttctaaagcc aaggggtcct gcccatctcc aatagctgac aagaactctt tcttttcttt 120

acaaatgcca gagcctttac tagacttttt gtgcttgttt agcctacttg acctagagtg 180

gtctaccttt gcttatgatt gaatgaaccg gtgttcttgt ctcttgtaaa cacagtcgaa 240

cccaaagtat aagcgggcac ctagccctat ctagtccgaa aaacgcgagc tggaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagctcaa tgggaataag 360

agctcacaga cactcacaag ctatataggg cctgaaagaa agtctaggtt tgggctaggg 420

ttaactgctc taataaggag agctagctac tgggagtaaa aagagtgatc agaccgaatc 480

agaagatcca agtatcttac g 501

<210> 2913
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d08b1

<400> 2913

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taacattgta aagccaaggg ctttcgccga tctgcagtag ctgacatgaa ctgtgagttt 120

tctttacaaa tacgagaacc tatactagag tctagctggt tgtctaggtt cctcaaccta 180

gagtcgcgcc ccgggcctta taagcgaacc cagccgacat ggtctgtttc gtagagccat 240

gcctgccaac cggatacgcg cccaactcga ccattctagt ctggaccttg tgaactgggc 300

ctacaagaga cactgtgtcc gtggatccgg aggtcactct gtatacgaag cttcacaggc 360

gtaagagctt agagacccta caacttaatc ttggttcgat tgagatgaca cggtgggcgt 420

ggacctgcag agcgaattga caaaaccgct ggcgagcggc gaaggcacct tttacaagga 480

ccatacgaca agccccaatg ccaaggacgc tgccaacatg acggccg 527

<210> 2914
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d10b1

<400> 2914

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ttctcagttg ggtaatgaga cccttatacc ccattcatca tcatcaaacc aactttcaaa 120

agagtctcca ttgatggaag agactacggt cttatcaagg tgtcagcgcc aatgaataca 180

ttagctggac aacctcacca acttgcttca cgagcatttg gtcttgaccc gccaaggaaa 240

tgccatgagt aggaaccgga tccaggaagg aatctacatg gccatctgtg cgttgataat 300

cctgacactc ggca 314

<210> 2915
<211> 174
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017d11b1

<400> 2915

gggctatggg ccacgtgcga tctccaagaa gtactcagaa ctctttgttg ctgttgcaaa 60

accctgacga gacactggac gctcaatggg cgtactgctg gcttcagcct agagacctgc 120

tacctatgag tgagagagcc ccacacccgt ttttttttgtt gcatcaaccc acac 174

<210> 2916
<211> 563
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017d12b1

<400> 2916

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tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagctct 180

tgacgttggg acagctgcac taatggtagc aaacctatca aataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagagcg tcgagcaatc catgagagac 360

tggagctgta agtcaccacc gatctctctg gtttgctata ttattcccaa taatcaatga 420

agcttgattt gtatgaaacc cttggtctgc tagattcttg ccagaacggc tatatcgatg 480

gcttccaagc aatttcagac caaaaaacca tctgattcta catcagcaac aacaacagcg 540

aagcgaaatg gtatcactca aga 563

<210> 2917
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017e01b1

<400> 2917

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aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct atagagcttc 300

gccgggaccc tgcaacaggt ggcccctttg aagctgtcca gccacaggcg cagcgggatt 360

gagatcctcg ttctcgacgt tgctcccctt gcggtagaca cggtgttcgt ccacctggag 420

agcgaaatga caaaacggct ggagagcggc tagggcacct tatacaagga ccatccgaca 480

agccccaatg ccaggacgtt gccacatga 509

<210> 2918
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017e04b1

<400> 2918

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atcaaagatc cgcgggcgtt ggtccatctc gagtagctta caagaactat tgcgttcata 120

tacaaatgac aagaccttta ctagacttca cctggttgta tagcgtacta caggcccaga 180

atgctacctc cgtttataag ggcaggaacg ctgtgtctgt tctgttatac agacactcga 240

accaaaagac catagcgtcc atctagctcc tatctagtgc gaaaaaggct aactagaacc 300

acgtgacacg ctgtctctgt ggagacgaac ctacccattc gtaccaggct tgagaggcat 360

gagatctcac agacactcac acgttataca cggcttgaaa gaaactgtag ggctgggt 418

<210> 2919
<211> 275
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017e06b1

<400> 2919

ttactatagg gaaaggtggg acgcctgcca ggaccggcgc cggattgcct ggccatccac 60

tttccggttt tggtgctgct gctatacaac gggatcgctt tttaccttat agggcccaga 120

tcccaacgac aagcgtcttt acgatgtcca ccacgttgca gtcgctccat gggcccccaa 180

tgcgaacccc gtggacatgg cctggttcgt tgttgcctgt actgcgatcc cagcgacata 240

gttctattcg accatccagt tctctccctt ctcgg 275

<210> 2920
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017e08b1

<400> 2920

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tgcctttacc cacacttgat tgccttggag gaatccatga ttaacgagga tgtgattgac 180

gcgacatagg ctccgctgcc gagacacaac ttgaccacca gatgtcacac ctgaatggac 240

aaatggagac aacgtgcctg ctagcgtgtg gatatagctg caggaggagc tgggggaccc 300

cacggctaga ccggtccatt tgcgagggtc ttcaacgccg ctactgggaa tatcttggct 360

ttatttatct taacggtcgt gg 382

<210> 2921
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017e09b1

<400> 2921

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tgaaaccaca ggtgttgaac agatggggat actatccact cattctaata ggatcatggg 120

cattcggcac tattaaccgc atccatgatt tcatcgagcc agggcataag atcatctggc 180

tctcagttcc ttggcgtgtg acaggtggac taaaggtagc aaacctatca aataaataag 240

ttataaaatt cggcataaat catgtttgct cttcccgagc cgatggtctg aatggaggat 300

cttcagggcc tggtcgaatc aataacctat gggctcgaca actcaatgcg tagagcaatc 360

catgagagac tggagctgta agt 383

<210> 2922
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017e12b1

<400> 2922

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctaa gtttgggttt 420

gggttaactg ctctcataag gagagacagc tacttggatt agaaagagtg accaaaatga 480

<210> 2923
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f02b1

<400> 2923

ctctaacgct aacactttgt tacatctagc ggatttggat ttctttaaca actaaggctc 60

ctgtttttaa cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc 120

tttgttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc agcccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaatc agacctcaca aacactcaca agttatatag ggcttgaaag aaagcctaag 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaa 498

<210> 2924
<211> 584
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f04b1

<400> 2924

taacgctcaa cactttgtta catctagcgg atttggattt ctttaacaac taaggttcct 60

gtttttaaca ttttaatgcc aagggctttt gcccatctcc aatagctaac aagaactctt 120

tcttttcttt acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc 180

acctagagtc ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa 240

cacatcccaa cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac 300

tagaactaca tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa 360

tcggaataag acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt 420

tgggtttggg ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc 480

aaaatgaata agaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac 540

atgataatta aagattagat tcaggttcaa attgataggg aatg 584

<210> 2925
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f06b1

<400> 2925

gcctcatccc tgcatggatg gagacggaca aggcaaaagc gttaactgac gtgatcgcac 60

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cgcccagatg ccaatgacta gctctgataa gatgttcacc acacaacagg cgcgccaatg 180

gcccttaatg ggcaccgcgt ctacatggac gagtccattg tgcaagaact gctaaccggc 240

cacttgcgct atttgagcat acaactttag ccctacttga gggtgcttga gactaaagaa 300

gaaccctggc tcaggggggc ccatctaaga taggcagtca cagacacaag ggc 353

<210> 2926
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f08b1

<400> 2926

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ggcatgctga agccggatgg ttattagaac aggcagagcc tgttctgaaa gtgacaattg 120

ttccccgtgg aacagctggt ataagctgtg cacattatgt accaaatgag aatcttttga 180

tgacaaatga gcagctattt gatattacat gcatgacaat aggaggccga gctgcacagg 240

aggctctgat tggaagaatc tggactggtg cccataatga tcgggagaaa ggtacaaaga 300

cgacatatgc gctagtagct gtgtatggtt tcagagataa agttggtttt gtatacttct 360

cccagcgagg ggatggctat gaaatgaaca agccttac 398

<210> 2927
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f09b1

<400> 2927

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attagccttt ttacgtcaac ttcggacaac tatgggtcct tttgggccct tggttcctct 180

ggggaggatt ccatggcgaa agatgaactt attgcccgtc ttcgctcggt gggtgtacca 240

cctgaccctt ctatctcgcc tcgccgggac cgaagaagaa ctggggcgtc ctggtgcttc 300

agccggagaa gcttttatat gaccctgggc ctaagttggc aaatgaccgc cctttcccac 360

ccctttaatg gggaaaccct gggaaaaccc a 391

<210> 2928
<211> 479
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316017f10b1

<400> 2928

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cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc tttctttttct 120

ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag 180

tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc 240

aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta 300

catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata 360

agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg 420

ggttaactgc tctaataagg agagtcagct cttgggttaa aaagagtgat caaatgaat 479

<210> 2929
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f11b1

<400> 2929

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tgcacatgag cttacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtgggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacagc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gac 513

<210> 2930
<211> 542
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017f12b1

<400> 2930

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

tt 542

<210> 2931
<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017g04b1

<400> 2931

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aacattttaa atccaagggc ttttgcccat ctccaatagc tgacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatctgatgc agacatgata 540

attaaa 546

<210> 2932
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017g06b1

<400> 2932

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tgctattcaa ggggatccat tgtaacctca aagcgcccag atgccaatga ctagctctta 120

tacgatgtcc accacgcaac aggcgcgcca tgggccccga atgcgaaccg cgtctacatg 180

gccgggtccg ttgtgccgga actgctatct ggccacttgc cccattcgag cgtacaactc 240

tagccctcct tgtgggcgct tgagagctac gacgagaccc tgccacaggt ggccccttct 300

aagctaggca gccacagacg caagggcatt gagatcctct tgctcgacgt tgatcacctt 360

ccgatagaca cagagttcgt caacctgcag agcgaattga ctaaacggct ggagagctgc 420

gagggcacc 429

<210> 2933
<211> 528
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017g08b1

<400> 2933

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tttactagac tttttctgct tctttagctt acttcaccta gagtcttcta ccttttctta 180

tcattgaatc aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg 240

cccacctagt cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct 300

gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc 360

acaagttata tagggcttga aagaaagtct aggtttgggt ttgggttaac tgctctaata 420

aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaataaaaaa atcccagtat 480

tttacggtat ccatgagttc agatttgatg cagacatgat aattaaag 528

<210> 2934
<211> 547
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017g11b1

<400> 2934

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa 540

ttaaaga 547

<210> 2935
<211> 537
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017g12b1

<400> 2935

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tcctgttttt aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac 120

tctttctttt ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta 180

cttcacctag agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt 240

taaacacatc ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc 300

gaactagaac tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc 360

ttaatcggaa taagacctca caaacactca caagttatat agggcttgaa agaaagtcta 420

ggtttgggtt tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt 480

gatcaaaatg aatatgaaaa tccaagtatt ttacgggatc catgagttca aatttga 537

<210> 2936
<211> 495
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h01b1

<400> 2936

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acattttaaa gccaagggct tttgcccatc tccaatagct gacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtgc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaaggctaa ggttgggttg 420

gggttaactg gtctgacaag gagagtcagc tacttggatg acaaagagtg atcaaaatgc 480

ctaggataat ccggg 495

<210> 2937
<211> 596
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h02b1

<400> 2937

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gtttttaaca ttttaaagcc aagggctttt gcccatctcc aatagctaac aagaactctt 120

tcttttcttt acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc 180

acctagagtc ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa 240

cacatcccaa cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac 300

tagaactaca tgagacacta tctctgtggt tacgaaccta acactttcta ccaagcttaa 360

tcggaataag acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt 420

tgggttcggg ctaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc 480

aaaatgaata agaaaatcca agtgttttac ggtatccatg agttcaaatt tgatgcacac 540

atgataatta aagattagat tcaggttcaa attgataggg aatggtatca gatcat 596

<210> 2938
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017h04b1

<400> 2938

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gctccaatcc aatccaatcc aatccaatcc aaaatcgaat cgaatcccac tggattggag 120

ccagccagcg agatacgact caaatccgtg tcgtccgcgc gcgcgcgcat gaagacgaag 180

ctgctctact ctccttgtgc ttgaactagc cacgactctg cctcctgctg cttcctgccc 240

agtagcagga gccgggcacg gagggaggaa gatgcgcctg ccggtgctgc cggcgtacac 300

cttcaactcc agcaccgtcg atcgcccgcc gacgacgact taggatcctg ctcctcctgc 360

tcctcctact actgaggggg cagcacctgc agtctacaca gtgttcctca acatctacga 420

catctccccc atcaacaact acccatact 449

<210> 2939
<211> 591
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316017h05b1

<400> 2939

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aacattttaa agccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agagtcaggt tcacatgata gggaatggta tcagatcatg a 591

<210> 2940
<211> 577
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h08b1

<400> 2940

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tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccc tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accatccgac 480

aagccccaat gccaaggacg ttgccaacat gacgcccgag gagcgtctag ccacggcgct 540

cagggcagct ctcagcaccc tcaagatgtc cattccg 577

<210> 2941
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h09b1

<400> 2941

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ttgtttcatg agctgacaaa gaaatgctgc tgctgctatt caacgagatc gattctaacc 120

tcaaagcgcc cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg 180

ccatgggccc cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga 240

tccggcgact tgttccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc 300

ttcgccgtga ccctgcaaca ggtggccccc tcgaagctgt ccagccacag ccgcagcggc 360

attgagatcc tcgtcctcga cgttgctccc ctttcgctag acacggtgtt cgtcaacctg 420

gagagcgaat tgaccaaacc gctggagagc ggcgagggca ccttttacaa ggaccatccg 480

acaagcccca atgccaagga cgttgccaac atgacgcccg aggagcgtct agcca 535

<210> 2942
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h10b1

<400> 2942

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tgcacatgag ctgacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctcccct ttcgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaaag accattcgac 480

aagccccaat gccaggacgt tgccacatga c 511

<210> 2943
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316017h11b1

<400> 2943

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attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagacaatcc cagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaaga 545

<210> 2944
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a05b1

<400> 2944

atctctgtac ctagtagagg gtatggacaa gatagccaac tgacggcatt gcacatgacc 60

ttacaaagtc atggggttgc tgccatccac cgtgaccgac agtaaccttа tagtgcccat 120

acccaaacga caagctcact aacaatgttc acgcacgttg cagtcactcc atgtaccgcg 180

aatgccatcc ccttatacat ggactgaccc gttgtgcctt ttctgttata cacatactag 240

ccccatgcga ccatgcacat ctagccctac ttagtggcgc ttaagagatc tagcgctacc 300

ctgagacact gtgtctgttg gaaccaacct aacccccttct accaaggtta atagatctta 360

gacctcaccg acactcacat gtcatttgag g 391

<210> 2945
<211> 602
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018a06b1

<400> 2945

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ggtgttgaac agatggggat actatccact cattctaata ggatcatggg cattcggcac 120

tattaaccgt atccatgatt tcatcgagcc agggcataag atcttctggc tctcagttct 180

tgacgttggg acagctgcac taatggtagc aaacctatca ataaataag ttataaaatt 240

cgccatagat catctttgct cttcccgagt cgatgttctg aatgttgtat tttcagggct 300

tgttcaattc aatagcctat ggtttcaaca gctcagtgcg tcgagcaatc catgagagac 360

tggagctgta agtcaccacc gatctctttg gtttgctata ttattcccaa taatcaatga 420

agcttgattt ttatgaaacc cttggtctgc tagattcttg ccagaacggc tatatcgatg 480

gcttccaagc aatttcagac caaaaaacca tctgattcta catcagcaac aacaacagcg 540

aagcgaaatg gtatcactca agaccgatga cccagcgtga cactaacttt cactaataca 600

tt 602

<210> 2946
<211> 592
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018b03b1

<400> 2946

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acattttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggtct 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagacaat ccaagtattt tacggcatcc atgagttcaa atttgatgca gacatgataa 540

ttaaagatta gatcaggttc aaattgatag ggaatggtat cagatcatga ca 592

<210> 2947
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018b05b1

<400> 2947

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cagacaaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacatgg accatgcgac 480

aagccccaat tgccaggacg ctgccaacat gacg 514

<210> 2948
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018c02b1

<400> 2948

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acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc atgggccccg aatgcgaacc 180

ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc cggcgacttg tcccattcga 240

ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt cgccgtgacc ctgcaacagg 300

tggccccttc gaagctgtcc agccacagcc gcagcggcat tgagatcctc gtactcgacg 360

ttgctccccct ttcgctagac acggtgttcg tcaacctgga gagcgaattg acaaaacggc 420

tggagagcgg cgagggcacc ttttacaagg accatacgac aagccccaat gcccaagacg 480

ttgccaacat tgacgcccga agagcgtcta gcca 514

<210> 2949
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018c05b1

<400> 2949

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cccatctcca atagctaaca agaactcttt cttttattta caaattccaa aacctttact 120

agacttttttc tgcttcctta gcttacttca cctagaggct tttaccgttt cttatcattg 180

aatcaacccc ttttttttttt tcttttaaac acatcccaac ccaaagttta agcgcccacc 240

tagtcctatc tattccgaaa aatgcgaact tgaactacat gaggacctat ctctgtcgtt 300

acgaacctaa cacttcttac caagcttaat ctgaataaga cctcacccac actcacaagt 360

tatatagggc 370

<210> 2950
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018c06b1

<400> 2950

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cgccagcgga catgtccgtc acgcgggttc ttgcgctgct ggcggcggcg gcgctggtgg 180

tcgccgcgcc ggcgcgcgtg gtcgccgcgg gggcgtgcgc ggcggagagg atctacaaga 240

accgcgtgta cgcggcctgc accgacctgc ccaccctgtg cgcgtgcgtg cactgtagct 300

actagccggc ggcgtactcc ct 322

<210> 2951
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018d01b1

<400> 2951

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gctaacaaga actctttctt ttctttacaa atcccaaaac ctttactaga ctttttctgc 120

ttctttagct tacttcacct agaggcttct acctttttctt atcattgaat caacccctttt 180

ttttttttct tttaaacaca tcccaaccca aagtataagc gcccacctag tcctatctag 240

tccgaaaaat gcgaactaga actacatgag acactatctt tgtcgttacg aacctaacac 300

tttctaccaa gcttaatcgg aataagacct cacatacact cacaagttat atagggcttg 360

aaagaaagcc taggttcggg tttggggtaa ctgctctaat aaggagagtc agctacttgg 420

tttaataaga gtgatcaaaa tgaatataaa aatcccgtat ttccggattc atgagtcaaa 480

ttggaggcga cctgattat 499

<210> 2952
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316018d03b1

<400> 2952

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ctaacactta aaagttaagg gtttttgccc atctccaata gctaacaaga actgtttctt 120

ttctttacaa atccgaaaac ctttactaga cattatctgc ttctctagct cactgcacct 180

acatggcccc taccttgcct tatcattgaa tcaacccctt ttttgttttc atttaaacac 240

atcccaaccc atagtatgag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag 300

aactacatga gacactatct ctgtcgttac gaacctaaca ctttttacca agcttaatcg 360

gaataagacc tcacaaacac tcacaagata tatagggctt gaaagaaagt ctaggtttgg 420

gtttgggtta actgctctaa taaggagagt cagctacttg gattaaatag agtgatcgaa 480

ttgaataaga 490

<210> 2953
<211> 534
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018d04b1

<400> 2953

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ttgctggtgt tctagcatac gtcaccaaga gggccctacc tggtcttatc attgaatcaa 120

ccccttttctt tttttcttgt aaacacattc caacccaaag tataagggcc cacctagtcc 180

tatctagtcc gaaaaatgcg aactagaact acatgagaga ctatctttgt gggtacgaac 240

ctaacacttt ctaccaagct taatcggaat aagacctcac aaacactcac aagttatata 300

gggcttgaaa gaaagtctag ggttgggttt gggttaactg ctctaataag gagagacagc 360

tacttggaat taaaagagtg atcaaaatga ataagaaaac ccagatttta cgggatccat 420

gagttccaat tgatgcagac ctgaaattaa agattacatt caggtcaaat tgatagggat 480

ggttcagaac atgcaggggg tcgagagagc aactaagctg ggggggtttt tttt 534

<210> 2954
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018e01b1

<400> 2954

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acatttttaaa gccaagggct tttgcccatc tccaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttctttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt acggtatcca tgagttcaaa tttgatgcag acatgattat 540

taaag 545

<210> 2955
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316018e02b1

<400> 2955

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gcacatgagc tgacaaagaa atgctgctgc tgctattcaa cgagatcgat tctaacctca 120

aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca 180

tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc 240

ggcgacttgt cccattcgac catccagttc tcgccctcct cgtcggcgct tcagagcttc 300

gccgtgaccc tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt 360

gagatcctcg tcctcgacgt tgctcccctt ccgctagaca cggtgttcgt caacctggag 420

agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga ccatccgaca 480

tgccccaatg ccaaggacgt tgcccacatg acgcccgagg agcg 524

<210> 2956
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e04b1

<400> 2956

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gcacatgagc tgatcaaaga aatgctgctg ctgctatgca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg acgagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg tcccattcga ccatccagtt ctcgccctcc tcgtcggcgc ttcagagctt 300

cgccgtgacc ctgcaacagg tggcccccttc gaagctgtcc agccacagcc gcagcggcat 360

tgagatcctc gtcctcgacg ttgctccccct tccgctagac acggtgttcg tcaacctgga 420

gagcgaattg acaaaacggc tggagagcgg cgagggcacc ttttacaagg accattcgac 480

aagccccaat gccaaggacg ttggcaacat gacgcccgag gagc 524

<210> 2957
<211> 657
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e05b1

<400> 2957

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tgtttttaac attttaaagc caagggcttt tgcccatctc caatagctaa caagaactct 120

ttcttttctt tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt 180

cacctagagt cttctacctt ttcttatcat tgaatcaacc ccttttttt tttcttttaa 240

acacatccca acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa 300

ctagaactac atgagacact atctctgtcg ttacgaacct aacactttct accaagctta 360

atcggaataa gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt 420

ttgggtttgg gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat 480

caaaatgaat aagaaaatcc cagtatttta cggtatccat gagttcaaat ttgatgcaga 540

catgataatt aaagattaga ttcaggttca aattgatagg gcatggcatc agatcatgac 600

agtgtggtcg agtagagcaa tctaagcact gttcaatttt tttttttca aatcatt 657

<210> 2958
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018e06b1

<400> 2958

gttctccgac ctcttcccgc acctagcaaa tggtaagcca agaaagccaa ctgacggcat 60

tgcacatgag cttactaaga aatgctgctg ctgctattca acgagatcga ttctaacctc 120

aaagcgccca gatcccaatg accagctcgt cgacgatgtc caccacgttg cagtcgcgcc 180

atgggccccg aatgcgaacc ccgtcgacat ggcctggtcc gttgtgccgg tactgcgatc 240

cggcgacttg gcccattcga ccatccagtt ctcgccctcc tagtcggagc ttcagagctt 300

tgccgtgacc ctgcaacagg aggccccttc gaagctgtcc agccacagcc gcatggggat 360

tgagatcctc gtcctcgacg ttggttcgct atcgctagac acggagttcg tcaacctgga 420

gagcgaattg accaaacggc tggagagcgg tgagggcacc tttttcaagg accattcgac 480

aagccctaat gccaaagacg tctccaacat tacatcccga gga 523

<210> 2959
<211> 534

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018f03b1

<400> 2959

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tgacggcatt gcacatgagc tgacaaagaa atgctgctgc tgctattcaa cgagatcgat 120

tctaacctca aagcgcccag atcccaatga cgagctcgtc gacgatgtcc accacgttgc 180

agtcgcgcca tgggccccga atgcgaaccc cgtcgacatg gcctggtccg ttgtgccggt 240

actgcgatcc ggcgacttgt cccattcgac catccagttc tcgccctcct ggtcggcgct 300

tcagagcttc gccgtgaccc tgcaacaggt ggccccttcg aagctgtcca gccacagccg 360

cagcggcatt gagatcctcg tcctcgacgt tgctcccctt ccgatagaca cggtgttcgt 420

caacctggag agcgaattga caaaacggct ggagagcggc gagggcacct tttacaagga 480

ccatccgaca tgccccaatg ccaaggacgt tgtcaacatg acgcccgagg agcg 534

<210> 2960
<211> 508
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018f04b1

<400> 2960

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acatttttaaa gccaagggct tttgcccatc tccaatggct aacaagaact ctttcttttt 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gcttgggttt 420

gggttaactg ctctaataag gagaagcagc tacttggatt aaacagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggggt 508

<210> 2961
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018g02b1

<400> 2961

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actagacttt ttctgcttat tttaacttac tttaactaag aggggtggga cctttttttt 180

atgaagtgaa tcaaccccctt ttttttttt ttttaa 216

<210> 2962
<211> 319
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018g06b1

<400> 2962

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cttccgcctg cccccacctt tactggtcgg taccggagaa gagatcctcc ttcctctgac 120

gccagcggcc atgtccgaca cgcgggtact tgcgctgctg gcggcggtgg aactggtggc 180

cgccgcgccg gtgcgcgcgc acgcaggggc ggcttgcgcg gaaaaaagga acttcaagaa 240

cccggtgaac gcggcctggg ccgaactgac caaacaggtt gcttccaggc tcagttggaa 300

caaacctccc aaaaccccc 319

<210> 2963
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h01b1

<400> 2963

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ttttctttac aaatcccaaa acctttacta gacttttttct gcttctttag cttacttcac 180

ctagagtctt ctacctttc ttatcattga atcaacccct ttttttttt cttttaaaca 240

catcccaacc caaagtataa gcgcccacct agtcctatct agtccgaaaa atgcgaacta 300

gaactacatg agacactatc tctgtcgtta cgaacctaac actttctacc aagcttaatc 360

ggaataagac ctcacaaaca ctcacaagtt atatagggct tgaaagaaag actaggtttg 420

ggtttgggct aactgctcta ataaggagag tcagcttctt ggattaaaaa ga 472

<210> 2964
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h02b1

<400> 2964

ctctaaccct aacactttgt tacatctagc ggatttggat ttctttaaca actaaggttc 60

ctgtttttaa cattttaaag ccaagggctt ttgcccatct ccaatagcta acaagaactc 120

tttcttttct ttacaaatcc caaaaccttt actagacttt ttctgcttct ttagcttact 180

tcacctagag tcttctacct tttcttatca ttgaatcaac ccctttttt ttttctttta 240

aacacatccc aacccaaagt ataagcgccc acctagtcct atctagtccg aaaaatgcga 300

actagaacta catgagacac tatctctgtc gttacgaacc taacactttc taccaagctt 360

aatcggaata agacctcaca aacactcaca agttatatag ggcttgaaag aaagtctagg 420

tttgggtttg ggttaactgc tctaataagg agagtcagct acttggatta aaaagagtga 480

tcaaaatgaa taagaaaatc caagtatttt acggtatcca tga 523

<210> 2965
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316018h04b1

<400> 2965

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cccctcgtcc agtagggagc cgccatgagc cgatcggggc agccgccgga tctgaagaag 120

tacatggaca agaagctcca aatcaagctg aatgcgaacc gtgttgtcat tggcacgctt 180

cgtggatttg atcagttcat gaatttggtg gtggacaaca ctgtggaggt caatggagat 240

gagaagaccg acatagggat ggtggttctg agaggaaata gtgttgtgat gattgaagcc 300

cttgaaccaa ttgccaggtc tcagtgatat tttggcttgc ctgcttctgg gttagcacta 360

cttgagctaa tagtgtttgg tcaaaaccta tgcgcatgca attgggcaaa ttgtatccta 420

atatttgtat tgtgtgagat tcagcactta ttgtatagtt 460

<210> 2966
<211> 310
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019a01b1

<400> 2966

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acgccgcnna cgccgccaan ancngcaaga agcccgcccc acaaggcnac aagagcggaa 120

gnnacacaaa ccccccgcag gcgnagggac acnagnccag ccgcgggagg agaagcgncg 180

gcnnacaaaa cccaggngcc nagccccaaa anagcngacc ttncagaacn agagcgaggc 240

cgcgcccaga aaagaccacg ccaagcactc cgnacgagaa cgcncangaa acaaanaaag 300

ccttctcctc 310

<210> 2967
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019a02b1

<400> 2967

aagatgagct gaaagcccgt ccccgctcaa tgggtgaaca accaacccgt gctgtctatc 60

tggcagggag caaacaagaa ctgcc 85

<210> 2968
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316019a05b1

<400> 2968

ccggacacgg aagccggggg cgacccagct cacgcatatc acggaggagg gccggcggcg 60

acgccccgga agagagcaac ccgcgaacac gccgagcccc acccaggcgg acacgcaacg 120

agcccgacag cggggccaca gaggagaggg aaccccaggc cgacaaacga ggaacccaca 180

cccagcaaag ccacgcagac gacaccaagc aacaagggcg agcaacacga cgaggccagc 240

gggcgcgcgg aacggacacg agaaaaacac ggaaaacaca aaccaagagg acacaaacca 300

aaaaaacacc aacaggggcg 320

<210> 2969
<211> 520
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316019a06b1

<400> 2969

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cccaatgacg agctcgtcga cgatgtccac cacgttgcag atcgcgccat gggccccgaa 180

tgcgaacccc gtcgacatgg cctggaccga tgtgccggta ctgcgatccg gcgacttgtg 240

ccattcagac catacagttc tcgccctcct cgtgggcgct tcagagcttc gccgcgaccc 300

tgcaacaggt ggcccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg 360

tcctcgacgt tgctgcccct ccgatagaca cggtgttcgt caacctggag agcgaattga 420

caaaacggct ggagagcggc gagggcacct tttacaagga ccatgcgaca agctccaatg 480

ccaggacgtt gcaacatgac gcccgagagc gctagccacg 520

<210> 2970
<211> 562
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316019b01b1

<400> 2970

cctagcaaat ggtaatgcca agaatgccaa ctgacggcat tgcacatgag ctgtcaagtt 60

ttgctgctgc tgctattcaa cgagatcgat tctaacctca aagcgcccag atcccaatga 120

cgagctcgtc gacgatgtcc accacgttgc agtcgcgcca tgggccccga atgcgaaccc 180

cgtcgacatg gcctggtccg ttgtgccggt actgcgatcc ggcgacttgt cccattcgac 240

catccagttc tcgccctcct cgtcggcgct tcagagcttc gccgtgaccc tgcaacaggt 300

ggcccccttcg aagctgtcca gccacagccg cagcggcatt gagatcctcg tactcgacgt 360

tgctcccctt gcgctagaca cggtgttcgt caacctggag agcgaattga caaaactgct 420

ggagagcggc gagggcacct tttacaagga ccatgcgaca agccccaatg ccaaggacgt 480

tgccaacatg acgcccgacg agcgtctagc cacggcgctc agggcagctc tcagcaccct 540

caagattgtc cattccggcg at 562

<210> 2971
<211> 570
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019b03b1

<400> 2971

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cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg ggccccgaat 180

gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgcgatccgg cgacttgtcc 240

cattcgacca tccagttctc gccctcctcg tcggcgcttc agagcttcgc cgtgaccctg 300

caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcggcattga gatcctcgtc 360

ctcgacgttg ctcccccttcc gctagacacg gtgttcgtca acctggagag cgaattgaca 420

aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag ccccaatgcc 480

aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgctcag ggcagctctc 540

agcaccctca agattgtcca ttcccgcgat 570

<210> 2972
<211> 638
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019c01b1

<400> 2972

aacaccttgt tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa 60

cattttaaat ccagggtttt tgcccatctc caatagctaa caagaactct ttcttttctt 120

tacaaatccc aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt 180

cttctacctt ttcttatcat tgaatcaacc ccttttttttt tttcttttaa acacatccca 240

acccaaagta taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac 300

atgagacact atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa 360

gacctcacaa acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg 420

gttaactgct ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat 480

aagaaaatcc aagtatttta cggtatccat gagttcaaat ttgatgcaga catgataatt 540

aaagattaga ttcacgttca aattgatagg gaatggtatc agatcatgac agtgtggtcg 600

agtagagcaa tctaaagcat ggtcagtttt tttttttt 638

<210> 2973
<211> 588
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019c03b1

<400> 2973

cctttaacaa ctaaggctcc tgtttttaac acccgaaatc cgagggtatt tgcccananc 60

caacagcgaa caagaactca ggcttttctt tacaaatccc aaaaccttca ctagactttg 120

tgtgcttctt tagcttactt cacctagagg cttctacctt ttcttatcat cgaatcaacc 180

cctttctttt tttcttttaa acacatccca acccaaagta taagcgccca cctagtccta 240

tctagtccga aaaatgcgaa ctagaactac atgagacact atctctgtcg ttacgaacct 300

aacactttct accaagctta atcggaataa gacctcacaa acactcacaa gctatatagg 360

gcttgaaaga aagtctaggt ttgggtatgg gataactgct ctaataagga gagtcagcta 420

cttggattaa aaagagtgat caaaatgaat aagaaaatcc aagtatttta cggcatccat 480

gagttcaaat tggacgcaga cgtgagtatt aaagattaga ttcaggttca aattgatagg 540

gaatggtatc agatcatgac agtgcggtcg agtagagcaa tctaagca 588

<210> 2974
<211> 558
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019c04b1

<400> 2974

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agtttacaaa gttatgctgc tgctgctatt caacgagatc gattctaacc tcaaagcgcc 120

cagatcccaa tgacgagctc gtcgacgatg tccaccacgt tgcagtcgcg ccatgggccc 180

cgaatgcgaa ccccgtcgac atggcctggt ccgttgtgcc ggtactgcga tccggcgact 240

tgtcccattc gaccatccag ttctcgccct cctcgtcggc gcttcagagc ttcgccgtga 300

ccctgcaaca ggtggccccct tcgaagctgt ccagccacag ccgcagcggc attgagatcc 360

tcgtcctcga cgttgctccc cttccgctag acacggtgtt cgtcaacctg gagagcgaat 420

tgacaaaacg gctggagagc ggcgagggca ccttttacaa ggaccatccg acaagcccca 480

atgccaagga cgttgccaac atgacgcccg aggagcgtct agccacggcg ctcanggcag 540

ctctcagcac cctcaaga 558

<210> 2975
<211> 661
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019c05b1

<400> 2975

tacatctagc ggatttggat ttctttaaca actaaggctc ctgtttttaa cattttaaat 60

tcaagggctc cttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg 420

ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaaat 480

ccaagtattt tacggtatcc atgagttcaa atttgatgca gacatgataa ttaaagatta 540

gattcaggtt caaattgata gggaatggta tcagatcatg acagtgcggt cgagtagagc 600

aatctaagcc tagctcaggt ttttttttt tcaaattctt gactatgcaa cagacactag 660

c 661

<210> 2976
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019c06b1

<400> 2976

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acaccgtcat tgagctcaag gggcccgaca gaaccggcct tctctccgag atcttcgtcg 180

tgctggagga gctacagtgc aacgtcatgg cggccgaggc gaggacacac acgacgaggg 240

tggcctgcgt gttgtacttt aactacgagt cctccgcgca cgacatcgag gactcgtgcc 300

gcctgcccac gatcgatgag cggctgttgc acgtgctcca caggcactgc ggtggagact 360

acgactactg ctactatcgg ggagcgcaca ctaactggtt cgacggatgc acccacgtgg 420

accgacggct gcaccagctg atgcacgccc acatagacct 460

<210> 2977
<211> 436
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019d01b1

<400> 2977

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ccaccacgnn gcagccgcgc caggggccac gaaggcgaac cccnggaaca tggccagaac 120

cgcngngccg gcaccgcgaa ccggcgacca ggcccattcg accatccagt actcgccctt 180

ctcgagggcg ctaaagagct ccgccgggac cctgcaacag gtggcccctt agaagcagac 240

cagccacagc cgcagcggca atgagagcct aggaccccac agagcgtccc tagcgctaga 300

cacggagtac gagaacctgg agagcgaaac ggcaaaactg ctggagagcg gcgagggcgc 360

ctcttacgag gaccatacga gaagccccaa agccaaggac gttgccgaca tgacgcccga 420

agagcggcta gccacg 436

<210> 2978
<211> 470
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019d04b1

<400> 2978

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gcaacgagag cgaggggaac caaaaagcgc ccagacccca aggacaagcn acgcgacgag 120

gaccaccagc gggcagccgc gccaagggcc cccgaancgc caacccacgc aagacaaagg 180

cacagggccc gaagagcacg gcacgcgccg aacccagcga cccagaccca gacgaccagc 240

cagngagacg gccgccccga gggcgcgaaa gagcaacgac gagaccccgc aacagggggc 300

cccgacgaag aagccagcca cagacggagc ggcaaagaga gcccccgacc ccacggagac 360

ccccgaccgc cagacacgga gcacgacaac ccggagagcg aacagacaaa acggccggag 420

agcggcgagg gcaccccaaa caaggagcag ccgacaagcc ccaaagccaa 470

<210> 2979
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019d05b1

<400> 2979

tttttgccca gctgcaatag ctagcaagaa ctctttcttt tcttgacaaa tgccaaaacc 60

gttactagac tttgtgtggt actttagctg acttcaccta gaggggtcta ccttgtctta 120

tcattgaatc agccccttttt ttttttgct tttaaacaca tcccagccca aagtataagc 180

gcccacctag tcctatctag tccgaaaaat gcgaactaga actacatgag acactatctc 240

tgtggttacg aacctaacac tttctaccaa gcttaatcgg aataagacct cacaaacact 300

cacaagttat atagggcttg aaagaaagtc taggattggg tttgggttaa ctgctctaat 360

gaggagaggc agctacgggg attaaaaaga gtgatcagaa tgaataagaa aatccaagga 420

ttttacggta tccatgagtt caaagttgat gcagacatga taatgaagat tagattca 478

<210> 2980
<211> 650
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019f01b1

<400> 2980

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aacttttttaa atccaagggc ttttgcccat ctccaatagc taacaagaac tctttctttt 120

ctttacaaat cccaaaacct ttactagact ttttctgctt ctttagctta cttcacctag 180

agtcttctac cttttcttat cattgaatca acccctttt ttttttcttt taaacacatc 240

ccaacccaaa gtataagcgc ccacctagtc ctatctagtc cgaaaaatgc gaactagaac 300

tacatgagac actatctctg tcgttacgaa cctaacactt tctaccaagc ttaatcggaa 360

taagacctca caaacactca caagttatat agggcttgaa agaaagtcta ggtttgggtt 420

tgggttaact gctctaataa ggagagtcag ctacttggat taaaaagagt gatcaaaatg 480

aataagaaaa tccaagtatt ttacggtatc catgagttca aatttgatgc agacatgata 540

attaaagatt agattcaggt tcaaattgat agggaatggt atcagatcat gacagtngtg 600

gcgagtagag caatctaagc aatggtcagt ttttttttt ttttaaattc 650

<210> 2981
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsfl9316019f04b1

<400> 2981

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gccgccgccg cgaaacaagg agagcgagac gaaccgcaaa gcgcccagac ccaaangacg 120

agcgcgggga ccaggggcac cagccgggca gaacgcgcca agggccccga aagcgaaccc 180

agaggacacg gcccgggccg angagccgga accgcgaacc ggcgacaagg accaaccgac 240

cagccacggc ncgccccccg aggcggagca acagagcacc gccgagaccc agcgacaagg 300

ggccccaaag aagcaggcca gccacagacg caagggcgac gagagccgag agcacgacgc 360

gggnccccag gcgcgagaca cgagagccgc caaccaggag agcgaangga caaaacagcc 420

ggagagcggc gagggcaccg acaacaagga ccaaacgaca agccccaagg ccaaggacgc 480

caccaacacg 490

<210> 2982
<211> 209
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019f05b1

<400> 2982

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gcaggggcaa ggggcacnac cagccgcacc cccaaannca gagagccagg gcagaagacc 120

caccggagac gaggccacga cggngaaaca gcggacacaa acgggagcaa accaagcaga 180

aaaaacagcc aaacaaaccg gcaaagagc 209

<210> 2983
<211> 539
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019f06b1

<400> 2983

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ttttggagct tatacagaaa ngccgctggt gcgattcaac gagagcgatt ctaacctcaa 120

agcgcccaga gcccaacgac gagcgcgtcg accaggccca ccaggttagc aacggcgcca 180

tgggccccaa aggcgaaccc cgaggaatgg ccaggaacga tgagcctgaa cggccatccg 240

gcgacttggc ccatacgacc atccagtgct ggccctcctc gggggagcta aaaagaactg 300

cgcgcgaccc tgggacaagt ggccactggg aagctgtgca gccacaggct gagcgggaat 360

gagatcctcg atcacgacgc tgctgccttt gcgctcgaca cggtgtccga agcacctgga 420

gagcggaacg acaaaactgc tggcgagcgg cgagggcacc tataagaagg accatacgac 480

aagtcccaat gccaaggacg ttgccaacat gacgcgcgac gagcggctag ccacggcgc 539

<210> 2984
<211> 558
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019g01b1

<400> 2984

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tatgagtgtc aaggaaatgc tgctgctgct attcaacgag agcgattcta acctcaaagc 120

gcccagatcc caatgacgag ctcgtcgacg aggtccacca cgttgcagtc gcgccatggg 180

ccccgaatgc gaaccccgtc gacatggcct ggtccgttgt gccggtactg cgatccggcg 240

acttgtccca ttcgaccatc cagttctagc cctcctcgaa ggcgctaaag agctctgccg 300

ggaccctgca acaggtggcc cctaagaagc tgttcagcca cagccgcagc gggattgaga 360

tcctcgacct acacgctgct cctcttgcgc tagacacaga gttcgtgaac ctggagagcg 420

aatcgacaaa acggctggag agcggcgagg gcacctttta caaggaccat ccgacaagcc 480

ccaatgccaa ggacgttgcc aacatgacgc ccgaagagcg gctagccacg gcgctcatgg 540

cagctctcag caccctca 558

<210> 2985
<211> 574
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019g03b1

<400> 2985

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cgcncgccca tctgcgatag ctgacaagaa ctctgtcttt tctttacaaa gcccaaaacc 120

ttgactagac tttttctgct tctctagctg acttcaccta gagtctggta cctgttctta 180

tcatggggtc aacccctttt ttgttgtctt tgaagcacat cccaacccaa aggatgagcg 240

cccacctagt gctatctagc ccgaaaaagg cgaactagaa ctgcatgaga cactagctct 300

ggggttacga acctaacact ttctaccaag cttaatggga ataagacctc acaaacactc 360

acaagttata tagggcttga aagaaagcct aggtttgggt gtgggttaac tgctctaata 420

aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaataagaaa atccaaggat 480

ttcacggagt ccatgaggtc aaagttgagg cagacatgat tatcaaagat gtgattcagg 540

ttcaaactga taggggatgg atcagatcat gaca 574

<210> 2986
<211> 413
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019g04b1

<400> 2986

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cacccagagg aaacggagca ggggcatgcg gcactatgac ccgcacccaa gagngcagag 120

agccagggca gaagaacagc gggcccacag cgcacgacgg cgggacagcn gcacaaaagg 180

gagcaaaccc agcaaaaaaa ccagncacac aacgcgccac agagcaccaa agcccgaccc 240

gagccgacgn gcggaaagag gagatacgaa gagccgccgc aaccagtagc ccatgggaaa 300

aacagctcag acgcgcgagc aagccatgag agactggagc tgacagtcac caccgagcgc 360

ttgggggtgc gatagtattc ccaaaaatca aagaagcttg acttttatga aac 413

<210> 2987
<211> 665
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019g06b1

<400> 2987

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cgaactantt taaatttcag ggctnncgcc catctgcaat agctaacaag aactctttct 120

tttctttaca aatcccaaaa cctttactag acttttttctg cttctttagc ttacttcacc 180

tagagtcttc tacctttttct tatcatggaa tcaaccccctt ttttttttttc ttttaaacac 240

atcccaaccc aaagtataag cgcccaccta gtcctatcta gtccgaaaaa tgcgaactag 300

aactacatga gacactatct ctgtcgctac gaacctaaca ctttctacca agcttaatcg 360

gaataagacc tcacaaacac tcacaagtta tatagggctt gaaagaaaga ctaggtttgg 420

gtttgggtta actgctctaa taaggagagt cagctacttg gattaaaaag agtgatcaaa 480

atgaataaga aaatccaagt attttacggt atccatgagt tcaaatttga tgcagacatg 540

ataattaaag attagattca ggttcaaatt gatagggaat ggtatcagat cattgacagt 600

gtggtcgagt agagcaatct aagcatggct cagtttttt tttttcaaat tattgacttg 660

cacag 665

<210> 2988
<211> 593
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316019h01b1

<400> 2988

taacactttg ttacatctag cggatttgga tttctttaac aactaaggtt cctgggcgta 60

actctttaaa tcctagggct atggcccatc tgcaatagct aacaagaact ctttcttttc 120

tttacaaatc ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga 180

gtcttctacc ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc 240

caacccaaag tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact 300

acatgagaca ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat 360

aagacctcac aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt 420

gggttaactg ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga 480

ataagaaaat ccaagtattt tacggtatcc atgagttcaa atttgatgca cacatgataa 540

ttaaagatta gattcacgct caaattgata gggaatggta tcagatcatg aca 593

<210> 2989
<211> 425
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019h03b1

<400> 2989

gaacacgagg gaaccggacg cgcagcagag aggcgcgcca cgacagccga cggagcgcag 60

aagctctgga gcggacaggg caangccgca gcgtgcgata caacgagagc gagccgaacc 120

gcaaagcgcc cagaccccaa cgacgagcgc gccgaccagg accaccaggg tgcagacgcg 180

ccaggggccc ccgaaagcga accccaggga caaggcccgg accagtgagc cggaaccgca 240

aaccggcgac aagcaccaag cgcccaccca ggcccagccc gaccggaaag cgcgaacaag 300

aactgccggg gccacgaacc cggaggacac gaaccagaca cacaccacca cagcgaacgg 360

gaaacgaccc cacaaacacc cccaagcaac acagggctgg aaagaaagac caggagaggg 420

cacgg 425

<210> 2990
<211> 544
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019h04b1

<400> 2990

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cgcncgccca tcaccaatag ctgacaagaa ctcttccctt tctttacaaa tcccaaaacc 120

ttgactagac tttgtctgct tctttagctg actccaccta gaggcgtcta cctcgtctta 180

tcattgagtc aacccctttt ttgttttctt ttaaacacat cccaacccaa agtataagcg 240

cccacctagt cctatctagt ccgaagaatg cgaactagaa ctgcatgaga cactatctct 300

gtcgttacga acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc 360

acaagttata tagggcttga aagaaagtct aggtttgggt gtgggttaac tgctctaata 420

aggagagtca gctacttgga ttaaaaagag tgatcaaaat gaataagaaa atccaaggat 480

tttacggaat ccatgagttc aaagttgatg cacacatgat tattaaagat tggattcacg 540

ctca 544

<210> 2991
<211> 395
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316019h06b1

<400> 2991

ccggggcgac ccacgttgcc gcgttggtcc cgcngacgcc cacgaacaag gactttgaaa 60

aaccgaagcc ggcncacacc acagcgagaa acggaggcga gaagcccacg agcgccacaa 120

gaagaggggg gcaccacagg ccccaaacca agaaaacaac agnccgacna acaggaaccc 180

cgaggaaaan ggggcgaagg cagcccgaga cgagcccggg aaaacaccga ccgcacagac 240

cccaaaagcc caaggcgccc cgacaggaaa anacacccca gcgaagccac caacaggacc 300

ccgaggacgg aganacacca ccgacagcca gcccaagcac caaccgcgca ccaacaaaga 360

cagggagaaa ggaggaagca angacaaaac cccaa 395

<210> 2992
<211> 500
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020a05b1

<400> 2992

aagccaagaa agccaactga cggcatngca cattagcagt catgaaangc ngcngcngct 60

atggaacgag atcgatttta acctcaaagc gcccagatcc caatgacgag ctcgttgacg 120

atgtccacca cgttgcagtc gcgccatggg ccccgaatgc gaaccccgtc gacatggcct 180

ggtccgttgt gccggtactg cgatccggcg acttgtccca ttcgaccatc cagttctcgc 240

cctcctcgtc ggcgcttcag agcttcgccg tgaccctgca acaggtggcc ccttcgaagc 300

tgttcagcca cagccgcagc ggcattgaga tcctcgttct cgacgttgct ccccttccgc 360

tagacacggt gttcgtcaac ctggagagcg aatcgacaaa accgctggag agcggcgagg 420

gcacctttta caaggaccat tcgacaagcc ccaatgccaa ggacgttgcc aacatgacgc 480

ccgaggagcg gctagccacg 500

<210> 2993
<211> 549
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020a06b1

<400> 2993

ccgcacctcg caaatggtac agccaagaaa gtcaactgac ggcattgcac attagcagtc 60

atgaaangcc gcngcngcta tncaacgaga tcgattttaa cctcaaagcg cccagatccc 120

aatgacgagc tcgtcgacga tgtccaccac gttgcagtcg cgccatgggc cccgaatgcg 180

aaccccgtcg acatggcctg gtccgttgtg ccggtactgc gatccggcga cttgtcccat 240

tcgaccatcc agttctcgcc ctcctcgtcg gcgcttcaga gctttgccgt gaccctgcaa 300

caggtggccc cttcgaagct gtccagccac agccgcagcg gcattgagat cctcgtcctc 360

gacgttgctc cccttccgct agacacggtg ttcgtcaacc tggagagcga attgacaaaa 420

cggctggaga gcggcgaggg caccttttac aaggaccatt cgacaagccc caatgctcag 480

gacgttgcca acttgacgcc cgaggagcgt ctagccacgg cgctcagggc agctctcagc 540

accctcaag 549

<210> 2994
<211> 280
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020a07b1

<400> 2994

caaaagggca gccacgaaag ccgaccgacg gcaccgcaca atagcaatca aagaaacgcc 60

gcgcggccag gggcgagagc aaagagaaac gccggagccc acaccccaac gacgagcgag 120

ncgacgagga ccaccacagc gcagacgggc caggggcccc gaaggcgaac cccggcgaca 180

aggccgagga aagacgagcc ggaacgagcg aacacgggcg acgaggacca aacagaccag 240

aacagagcaa gcccaaccga cggggagagc aaaaaaagaa 280

<210> 2995
<211> 469
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020a09b1

<400> 2995

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gaaangccgc cgccgccang gaacgagatc gaagctaacc gcaaagcgcc cacancccaa 120

ngacgagcgc gnngacgagg accaccacgc ggcagacgcg ccaggggccc cgaaggcgaa 180

ccccgacgac acggcccgga ccagagagcc ggaacggcga cccggcgacg aggcccaaac 240

gaccaaccag cgcacgcccg ccgcgggggc gccacagaga cacgccgcga ccccgcaaca 300

ggcggccccg acgaagcaga ccagccacag ccgcagcggc aaagagaacc acgaccacga 360

cagagccccc cggccgccag acacggagga cgacaacccg gagagcgaan agacaaaacg 420

gcaggagagc ggcgagggca ccnanaacaa ggaccaaccg acaagcccc 469

<210> 2996
<211> 613
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020a11b1

<400> 2996

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tcttatagct aagggctatc gcccatctgc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ctaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

agaaaatcca agtattttac ggtatccatg agttcaaagt tgatgcacac atgattatta 540

aagattagat tcacgctcaa attgataggg aatggtatca gatcaatgac agtgtgggcg 600

agtagagcaa tct 613

<210> 2997
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020a12b1

<400> 2997

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cgtcgcaagc cctggtccgt agtgcctgta cacgccatcc gagcgacttg tgctatgcga 180

ccatccagtt ctagccctcc tggaaggagc taactagaac tgccgggacc actctacagg 240

tggtcactaa caagctactc aaccacaggc gaagtgggaa tgagatcctc gaaccacacg 300

caggttctct tgcgcttgac acagagtcca gcgacctgta gagcgaaacg acacaactga 360

tggggagcgg cgagggcgcc tataacgagg gccctacgac aagccccaaa gccaaggacg 420

ttaccgacat gacgcccgca gagcggctag ccacagtact atggcagatg cagcacgctc 480

<210> 2998
<211> 437
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020b04b1

<400> 2998

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attgcccatc tgcaatagct aacgaggaac tctttatttt ctttgggagt gccaaaacct 120

ttactagact ttgtctgctt ctttagctta cttcacctag aggcgtgtac cttttcttat 180

cattgagtca acccctttt ttttttcttg taaacacatc ccaacccaaa ggatgagcgc 240

ccacctagtc ctatctagtc cgaaaaatgc gaactagaac tacatgagac actatctctg 300

gcgatacgaa cctaacactn tctaccaagc ttaatcggaa taagacctca caaacactca 360

caagttatat agggcttgaa agaaagtcta ggttcgggtt cgggttaact gctctaataa 420

ggagagtcgg ctacttg 437

<210> 2999
<211> 478
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020b05b1

<400> 2999

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aaaaccttta ctagactttg tctgcttctt tagcttactt cacctagagg cttctacctt 180

ttcttatcat tgaatcaacc cctttttgt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg gtacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat aagaaaat 478

<210> 3000
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020b06b1

<400> 3000

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tagggttttt gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca 120

aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataggaga gtcagctact tggataaaaa gagtgatcaa aatgaataag aaaattcaag 480

ttttttacgg tatccatgag ttcaaat 507

<210> 3001
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020b07b1

<400> 3001

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gctattgccc agcggcaata gctaacaaga actctttctt ttttttacga tccgcaaaac 120

ctttactaga ctttgtctgg ttctttagct tacttcacct agagtgttct acctttttctt 180

atcatggagt caaccccttt tttgttttct tttaaacaca tcccaaccca aagggtgagc 240

gcccacctag tcctatctag tccgaagaat gcgaactaga actacatgag acactatctc 300

tgtcgttacg aacctaacga ctttctacca agcttaatcg gaataagacc tcacaaacac 360

tcacaagtta tatagggctt gaaagaaagg ctaggtttgg gtttgggcta actgctctaa 420

taaggagagg gaggtacttg gattaaagag agtgatcaaa atgaataaga aaattcaagg 480

gttttac 487

<210> 3002
<211> 480
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020b08b1

<400> 3002

tacatctagc ggatttggat ttctttaaca actaaggttc ctgtttttaa cattttaaag 60

cttangggct aatgcccatc tccaatagct aacaggaact ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt ggggtaactg 420

ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaaat 480

<210> 3003
<211> 515
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020b09b1

<400> 3003

catctagcgg atttggattt ctttaacaac taaggttcct gtttttaaca ttttaaagct 60

aagggactan tgcccatctc caatagctaa caagaactct ttcttttctt tacaaatccc 120

aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt cttctacctt 180

ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagtcagcta cttggattaa aaagagtgat caaaatgaat aagaaaatcc 480

aagtatttta cggtatccat gagttcaaat ttgat 515

<210> 3004
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020b10b1

<400> 3004

acctagcaga gaggtaagtc acgacagccg actgtcggca ttgcacatga gcggtaaggt 60

tttgctgctg ctgctataca acgagagcga ttttaacctc atagcgccca gatcccaatg 120

acgagctcgt cgacgaggtc caccacgttg cagtagcgcc atgggccccc aatgcgaacc 180

ccgtggacat ggcctggttc gttgtgccgg tacagcgatc cggcgactag tcccatgcga 240

ccatccagtt ctagccctcc tcgacagcgc taaagagctc tgccgggacc ctgcaacagg 300

tggcccctaa gaagctgttc agtcacaggc gtagtgggat tgagatcctc caactagacg 360

ta 362

<210> 3005
<211> 625
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020b11b1

<400> 3005

tgttacatct agcggatttg gatttcttta acaactaagg ttcctgtttt taacatttaa 60

agctagggca tttgcccatc tccaatagct aacaagaact ctttcttttc tttacaaatc 120

ccaaaacctt tactagactt tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg 420

ctctaataag gagagtcagc tacttggatt aaaaagagtg atcaaaatga ataagaaaat 480

ccaagtattt tacggattcc atgagttcaa atttgatgca gacttgataa ttaaagatta 540

gattcaggtc aaattgatag ggaatggttt cagatcatga cagtgtgggc gagtagagaa 600

tttaagcatg gtcagttttt ttttt 625

<210> 3006
<211> 92
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020c06b1

<400> 3006

gcggtcgagg aaccaagctt ataaacgctt ttgtgcgacg ccaaagccca acgagaacga 60

tacctaattt caaggcactg gcacaaccgg ta 92

<210> 3007
<211> 273
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020c07b1

<400> 3007

gagcttctgc attatttcac ggcgaccgcc ggcaaggacg agaagaacgc tctcggaggc 60

gaggcccaac cgaccaaggc ccncgacaag ggccccacgn agaagaaccc ggacgacgcc 120

cccggcccna acacgggggga gagcacgacg gagccngaca cggacgccag cggacagacg 180

aacgagagga gaagcaccca gaagnggccg gacagcgggg agaggacaag cccgaagacg 240

cagcagccac gggcgcacca aacgcaggcg ccc 273

<210> 3008
<211> 292
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020c08b1

<400> 3008

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cggccaccca ccgagagcga gagtaacctt aaagcgccca gaccccaacg acaagcgcgn 120

cgacgagggc caccacggna gcagcgcccc acgggccccg aaggcgaacc ccggggacaa 180

ggccgggacc gccgagccgg gacggccagc cggagacgag ccccaagcga ccaaccagng 240

ctcgcccgcc ccgacggcgc gagaaagaac cgccgggacc cggagacagg gg 292

<210> 3009
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020c10b1

<400> 3009

caccgtacct tttatcggaa gcaccaacca tggcggcggc ggcgaagata gcgccgacca 60

tgctctcgtc ggacttcgcc aacctcgcct cggaggccga gcgcatggtc cacctcggcg 120

ccgactggct ccacatggac gtcatggatg ggcacttcgt tcctaattta actattggag 180

ctccagtgat tgagagcttg aggaagcaca caaaggcata tttggactgc catctcatgg 240

tcacaaatcc ttccgattat gtagaggcat ttggaaaagc tggtgcctca ggattcacat 300

tccatataga agtagcgagg gataactgga aagagctcac ccaaagcatt aaagcaaagg 360

gcatgcggtc tggtgtatca ttgaagcctg gtactcctgt ggaggatgtt ttcctcctgg 420

aggaagcaga aacccctgta gagttggttc tcgtgatgac ggtcgagcct ggctttggtg 480

gccagaagtt catgcccgag atgatggata agtacgtacg ctgaggaag 529

<210> 3010
<211> 609
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020c11b1

<400> 3010

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taagggcata nttcccatcn ccaatagcta acaagaactc tttcttttct ttacaaatcc 120

caaaaccttt actagacttt ttctgcttct ttagcttact tcacctagag tcttctacct 180

tttcttatca ttgaatcaac ccctttttt ttttctttta aacacatccc aacccaaagt 240

ataagcgccc acctagtcct atctagtccg aaaaatgcga actagaacta catgagacac 300

tatctctgtc gttacgaacc taacactttc taccaagctt aatcggaata agacctcaca 360

aacactcaca agttatatag ggcttgaaag aaagtctagg tttgggtttg ggttaactgc 420

tctaataagg agagtcagct acttggatta aaaagagtga tcaaaatgaa taagaaaatc 480

caagtatttt acggtatcca tgagttcaaa tttgatgcag acatgataat taaagattag 540

attcaggttc aaattgatag ggaatggtat cagatcatga cagtgtggtc gagtagagca 600

atctaagca 609

<210> 3011
<211> 548
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020c12b1

<400> 3011

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catttaaagc tagggttttt gcccatctcc aatagctaac aagaactctt tcttttcttt 120

acaaatccca aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc 180

ttctaccttt tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa 240

cccaaagtat aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca 300

tgagacacta tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag 360

acctcacaaa cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg 420

ttaactgctc taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata 480

aaaaaatcca agtattttac ggtatccatg agttcaaatt tgatgcagac atgataaata 540

aaagatta 548

<210> 3012
<211> 321
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020d04b1

<400> 3012

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anncaacgag ggcgangcga accggaaagc gcccagaccc caacgacgag cgcgnngacg 120

aggaccacca cgccgcagcc gcgccagggg ccccgaaagc gaaccccggc gacacggccc 180

ggaccggagg gccgggaccg agaaccggcg acaagggcca accgaccacc cagggcncgc 240

ccgccccgac ggcgcgaaag agcaccgccg ggacccagca acaggggccc ccgacaaagg 300

aagcccaacc acagccgcag c 321

<210> 3013

<211> 629
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020d05b1

<400> 3013

acatctagcg gctttggatt tctttaacaa ctaaggtttt tgtttttaac attggaaaga 60

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aaaaccttta ctagactttt tctgcttctt tagcttactt cacctagagt cttctacctt 180

ttcttatcat tgaatcaacc ccttttttt tttcttttaa acacatccca acccaaagta 240

taagcgccca cctagtccta tctagtccga aaaatgcgaa ctagaactac atgagacact 300

atctctgtcg ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa 360

acactcacaa gttatatagg gcttgaaaga aagtctaggt ttgggtttgg gttaactgct 420

ctaataagga gagccagcta cttggattaa aaagagtgat caaaatgaat aagaaaatcc 480

acgtttttta cggtatccat gagttcaaat ttgatgcaga catgataatt aaagattaga 540

ttcaggttca aattgatagg gaatggtatc agatcatgac ggggtgggcg agtagagcaa 600

tctaagcatg gttcacattt tttttttt 629

<210> 3014
<211> 368
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020d06b1

<400> 3014

taacaactaa ggggcttgga tttaacattc naaagcttag ggtttttgcc cancnccaaa 60

agccaacaag aacgctttcg gggcnaaaca cagcccaaaa ccngnacgag acgggggccg 120

cggcnanagc acacgacacc cagaggcagc aaccccggca gaacaacgaa gcaaccccgg 180

ngcgncngga cgagaaacac agcccaaccc aaagnagaag cgcccaccca ggccnaacna 240

ggccgaaaaa ggcgaaccag aaccacagga gacacnancn cgggcgnnac gaaccnaaca 300

ccgccnacca agccnaancg gaaaaagacc ncacaaacac ccacaagnna aanagggcgc 360

gaaagaaa 368

<210> 3015
<211> 376
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020d08b1

<400> 3015

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gcngcaatag ctcacgggaa ctcttaattt tcttgaccca acccaaaacc gtgacgagac 120

tgtgcccggt ccattagctt actgcaccgc gaggggggcta cctggcctta tcagggaatc 180

aaccccagga atgtgtgcct gtaaacacat cccaacccag agggtaagcg cccacccagt 240

gctatctagc ccgaaaagtg cgaactagaa ctacaggaga cactatccct gtggttacga 300

acctaacgct tcctaccagg cttaatcgga ataagacctc acaaacactc acaggtgata 360

tagggcttga aagaaa 376

<210> 3016
<211> 100
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020d11b1

<400> 3016

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accaagaagc agggtgcacc taaaaagccg caggcggacc 100

<210> 3017
<211> 163
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020e04b1

<400> 3017

cagaaggcga accgcggagg caagcacgag gaacgacgag acggaacggc gacccgggga 60

cgcggggaga acaaccaacc agggaaggcc ccccgacggg gagcgaaaaa gaaccggcgc 120

gaacccgggg gcagagcgga cccgaggaaa gccagcgcac acc 163

<210> 3018
<211> 296
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020e05b1

<400> 3018

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caacgagagc gagggaaccg aaagcgcccg agcccacgac cagcccgnng cgaagccacc 120

acgacgcaga cgcccaaggg ccccgaaggc gaaccccgaa gacgggacag gccgaaggcc 180

ggacagcgac cggcgacgag cccaaacgac caacagagcc gccccccggg ggcgcggcag 240

agcaacgcca gaccccgcac aggcggcccc aagaagcagg ccgccacagc cgagcg 296

<210> 3019
<211> 403
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020e06b1

<400> 3019

cganggaccc caagggagac aacggtttta tcaattcgcc caagatgacc gtcggggtca 60

acaaatatcc caataatcag aatgggaagg aaacagacgg caaacacaat ggtgttaaca 120

acaacaatgg aggcaacagc aacaacaact ctgttgacaa gcgcttcaaa acattgccaa 180

caagcgagat gctaccgagg aatgaagttc ttggtggata catctttgtc tgcaacaatg 240

ataccatgca ggaggatctc aagagacagc tttttggctt gccagcaaga tatcgtgatt 300

cagtccgagc catcactcct ggtctacctc tttttctcta caactacacg acccatcagc 360

tacatggggt gtttgaggct cccagttttg gaggatcaaa cat 403

<210> 3020
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020e08b1

<400> 3020

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aacgagagcg antttaaccg caaagagccc agaccccacc gacgagcgcg nngacgaggg 120

ccaccacgcc gcagncgcgc caggggcccc gaaggcgaac cccgacgaca aggcccgggc 180

cgaagnggcc ggacagcgaa ccggcgacaa ggcccaagcg accacccagn ncncgcccgc 240

cccgaaggcg cgaaagagca ccgccgggac cccgcaacag ggggccccna agaagccagc 300

cagccacagg cgcagcggcg aagagacccc cgaccccgac gcagcgcccc caccggcaga 360

cacggaggnc gggaacccgg agagcgaaac gacaaaacgg cgggagagcg gcgagggcac 420

cnnnaacaag gaccanccga caagcccca 449

<210> 3021
<211> 609
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020e09b1

<400> 3021

gacgccttta acaactaagg tttttgtttt taacacanga aagataaggt tttttgccca 60

gcnccaanag cnaacaagaa ctctttcttt tctttacaaa tcccacaacc tttactagac 120

ttttttctgct tctttagctt acttcaccta gaggcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt ttaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagt ccgaaaaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccaag cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagtct aggtttgggt ttggggtaac tgctctaata aggagagtca 420

gctacttgga ttaaaaagag tgatcaaaat gaataagaaa atccaaggat tttacggtat 480

ccatgagttc aaagttgatg cagacatgat aattaaagat tagattcagg ctcaaattga 540

tagggaatgg tatcagatca tgacagtgtg gtcgagtaga gcaatctaag catggttcag 600

tttttttttt 609

<210> 3022
<211> 586
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020e10b1

<400> 3022

gatggcttta acagctaagg ttcttgccct taacacngga aagcttaggg tttttgccca 60

ccngcaatag ctaacaggaa ctctttattt tctttacaca tcccaaaacc tttactagac 120

tttgtctgct tctttagctt acttcaccta gagtcttcta ccttttctta tcattgaatc 180

aacccctttt tttttttctt gtaaacacat cccaacccaa agtataagcg cccacctagt 240

cctatctagc ccgaagaatg cgaactagaa ctacatgaga cactatctct gtcgttacga 300

acctaacact ttctaccagg cttaatcgga ataagacctc acaaacactc acaagttata 360

tagggcttga aagaaagcct aggtttgggt ttgggttaac tgctctaata aggagagtca 420

gctacttgga ttaaaaagag tgatcaaaat gaataagaaa atccaagtct tttacggtat 480

ccatgagttc acagttgatg cagacatgat aattaaagat tagatgcacg ctcaaattgt 540

agggaatgga tcagatcatg acagtgtggg cgagtagagc aatcta 586

<210> 3023
<211> 496
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020e11b1

<400> 3023

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aacgagagcg attttaacct taaagcgccc agatcccaat gacgagctcg tcgacgatgt 120

ccaccacgtt gcagtcgcgc catgggcccc gaatgcgaac cccgtcgaca tggcctggtc 180

cgttgtgccg gtactgcgat ccggcgactt gtcccattcg accatccagt tctcgccctc 240

ctcgtcggcg cttcagagct tcgccgtgac cctgcaacag gtggcccctt cgaagctgtc 300

cagccacagc cgcagcggca ttgagatcct cgttctcgac gttgctcccc ttccgctaga 360

cacggtgttc gtcaacctgg agagcgaatt gacaaaacgg ctggagagcg gcgagggcac 420

cttttacatg gaccattcga caagccccaa tgccaaggac gttgccaaca tgacgcccga 480

ggagcgtcta gccacg 496

<210> 3024
<211> 177
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020f04b1

<400> 3024

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nccgcggagc gagggccaaa caaccacaca gagatggccc nccgccgggg agcaacaaag 120

aaccgccgcg acccggcaac aagcggcccg agggaagcgg accacccaca gccgcag 177

<210> 3025
<211> 231
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020f08b1

<400> 3025

gaggcggcca ccaggccaga gcagggaacc aaccccgggn cggggagcag gcaaacacaa 60

cccaacccaa aggagaagcg cccacccagn ccganccagn ccgaaaaacg cgaacnagaa 120

cgacaggaga cacnagccgg ggcgcacgaa cccaacacnc acgaccaagc ggaangggaa 180

naagacccca caaacacaca caagngacan agggccagaa agaaagccca g 231

<210> 3026
<211> 236
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316020g04b1

<400> 3026

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caaaaggcca acccgcaacc ggcggccgag gcgcacggag gagacgacaa gctagcaggg 120

cgaaacggga aagagcccta aaccggccag gcggcaagag actgacaaac agcacccagc 180

cccaagagcc agggcccacc cacaccaacc agatgcgcct ccagccaagt ggaaca 236

<210> 3027
<211> 578
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020g07b1

<400> 3027

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ccaaaacctt tactagactg tttctgcttc tttagcttac ttcacctaga gtcttctacc 180

ttttcttatc attgaatcaa ccccttttt ttttttcttt aaacacatcc caacccaaag 240

tataagcgcc cacctagtcc tatctagtcc gaaaaatgcg aactagaact acatgagaca 300

ctatctctgt cgttacgaac ctaacacttt ctaccaagct taatcggaat aagacctcac 360

aaacactcac aagttatata gggcttgaaa gaaagtctag gtttgggttt gggttaactg 420

ctctaataag gagagccagc ttcttggata aaaagagtga tcaaaatgaa taagaaaatc 480

caagcgtttt acgggatcca tgagttcaga tttgatgcag acatgataat taaagaatag 540

attcaggttc aaattgatag ggaatggttt cagatcat 578

<210> 3028
<211> 578
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020g08b1

<400> 3028

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tagggctatc gcccatctcc aatagctaac aagaactctt tcttttcttt acaaatccca 120

aaacctttac tagacttttt ctgcttcttt agcttacttc acctagagtc ttctaccttt 180

tcttatcatt gaatcaaccc ctttttttt ttcttttaaa cacatcccaa cccaaagtat 240

aagcgcccac ctagtcctat ctagtccgaa aaatgcgaac tagaactaca tgagacacta 300

tctctgtcgt tacgaaccta acactttcta ccaagcttaa tcggaataag acctcacaaa 360

cactcacaag ttatataggg cttgaaagaa agtctaggtt tgggtttggg ttaactgctc 420

taataaggag agtcagctac ttggattaaa aagagtgatc aaaatgaata agaaaatcca 480

agtattttac ggaatccatg agttcaaatt tgatgcagac atgataatta aagattagat 540

tcaggttcaa attgataggg aatggtatca gatcatga 578

<210> 3029
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020g12b1

<400> 3029

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cgcccatctg caatagctaa catgaactct ttcttttctt tacaaatccc aaaaccttta 120

ctagactttg tctgcttctt tagcttactt cacctagagt cttctacctt ttcttatcat 180

ggagtcaacc ccttttttt tttcttttaa acacatccca acccaaagga taagcgccca 240

cctagtccta tctagcccga aaaatgcgaa ctagaactac atgagacact atctctgtcg 300

ttacgaacct aacactttct accaagctta atcggaataa gacctcacaa acactcacaa 360

gttatatagg gctcgaaaga aagtctaggt ttgggttcgg gttaactgct ctaataagga 420

gagtcagcta cttggattaa aaagagtgat caaaatgaat aacaa 465

<210> 3030
<211> 258
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316020h04b1

<400> 3030

ccccacccac aaccggcacg agacggggcc agcgccacca gcggacagca ccgagagggg 60

cccaccaggc caaaccagag aaacaacccc gggccggaga gccgggaaac acaccccaac 120

ccaaaggaca agcgcccacc cagncctagc cagcccgaaa agagcgaaca agaaccgcag 180

gagacacgaa ccaggggggc acgaaccaaa cgcncaccac caagcgcaan gggaacaaga 240

ccccacaaac acacacaa 258

<210> 3031
<211> 233
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020h06b1

<400> 3031

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cgcgccaggg gccccgcagg cgaaccccga ggacaaggcc cggacacgag gggccggaca 120

gcgaaccggc gacaaagacc aagcgaccac ccaggcctag cccgcccgga gggcgcgaaa 180

gagaaccgcc gggaccccgc aacaggggggc cccgaagaag ccgcccagcc aca 233

<210> 3032
<211> 316
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020h07b1

<400> 3032

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caagagactg gacgaggtcc accagcttac ttaaccgcga ggggcccacc atgcgaaacc 120

agtgaaccag gcccggtccg ttgtgctggt acacgcatcc cagcgccaaa ggccaaagcg 180

cccacccagt cctagcccgg ccgaaaagcg cgaacgagaa ctgccgggga cacggtacat 240

ggggacacga accagacgct cagtaccaga gcgaaagggg aaggagaccc tacaaacact 300

cacaggtgac ataggg 316

<210> 3033
<211> 560
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020h08b1

<400> 3033

ttccgactta tgcccgcacc cagcagatgg tgagccacga aagccgactg acggcattgc 60

acaatagcag tcatggaaan gccgctgctg ctatacaacg agatcgattt taacctcaaa 120

gcgcccagat cccaatgacg agctcgtcga cgatgtccac cacgttgcag tcgcgccatg 180

ggccccgaat gcgaaccccg tcgacatggc ctggtccgtt gtgccggtac tgccatccgg 240

cgacttgtcc cattcgacca tccagttctc gccctcctcg tcggcgctaa agagcttcgc 300

cgtgaccctg caacaggtgg ccccttcgaa gctgtccagc cacagccgca gcgggattga 360

gatcctcgac ctcgacgctg ctcccccttgc gctagacacg gagttcgtca acctggagag 420

cgaatcgaca aaacggctgg agagcggcga gggcaccttt tacaaggacc atccgacaag 480

ccccaatgcc aaggacgttg ccaacatgac gcccgaggag cgtctagcca cggcgcttat 540

ggcagctctc agcaccctca 560

<210> 3034
<211> 543
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316020h09b1

<400> 3034

cccagcagag agggcagcca acgaaagccg actgacggca gagcacatta gcagtcaaag 60

aaangccgcc gctgcgatac aacgagatcg agtttaacct caaagcgccc agagcccaac 120

gacgagcgcg ccggcgaggc ccaccacggn gcagacgcgc caggggcccc gaaggcgaac 180

cccggcagca tggccgggac cggagagccg gaacggccac ccggcgacga ggggccaacg 240

accacccagn gctggccctc ctcgggggcg caaaagagaa ctgccgcgac cctgcaacaa 300

gcggccccag ggaagctgtg cagccacagc cgcagcggga atgagatcct cgtcctagac 360

gttgctcccc ttgcgataga cacggaggcc gtcaacctgg agagcgaaat gacaaaaccg 420

ctggagagcg gcgagggcac cttaaacaag gaccatgcga gcagccccaa tgccaaggac 480

gttgccaaca tgacgcccga cgagcggcta gccacggcgc tcagggaagc tctcagcacc 540

ctc 543

<210> 3035
<211> 65
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316020h11b1

<400> 3035

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atatt 65

<210> 3036
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316022a06b1

<400> 3036

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atccatggcc cccaaggcgg agaagaagcc ggtggcggag aaggccgaga agaccacgga 120

ggcgaagaag accaaggccg agaagcgacc gccggcgtcc aaggagggcg gcgagaagaa 180

ggggaagaag aagtccaaga agagcgtgga gacgtacaag atctacatct tgaaggtgct 240

gaagcaggtg cacccggaca tcggcatctt ctacaaggcc atgtccatca tgagctcctt 300

catcaacgac atcttcgaga agctcgccgg cgagtccgcc aagctcgccc gctacaacaa 360

gaagcccacc atgacgtcca gggagatcca gacgtgcgtg cgtctcgtgc tgcccggcga 420

gctcgccaag cacgccgtct gcgagggcac caaggcctgc accaagatca cctgctccta 480

gatgggctgt tccctgtcat g 501

<210> 3037
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316022d04b1

<400> 3037

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aagggaagag ctggatgagg agggatgcat ctcgggccct ggcattgatg tcatttgacc 120

ttaatgacct gactggagac ttggaaggcc tgagcccaga cgaactggag gttttacaag 180

actgggaaga gaagtttaaa gagaggtacc ctgtggtggg tcatcttcct ggtgaaaacg 240

gaacagctgg tgcccagcct gatcacgagg cagagaaggc ctaactctgt gtctgggttc 300

ttgtcccgtt gcctgtaagt tgatgtgtct tttactactg ctggactgtg agcggtagag 360

agatgtaatg cgctgacagg tgatgttgtt tgtatgtgtg ctgcatgagt gtgtgctact 420

gatgcacctg cttt 434

<210> 3038
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316022d10b1

<400> 3038

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aatgccaatg ttgtttgaca gcacacattt gacactctga atgccaatgt tgtttgacat 180

gacacatttg acactctgaa tgccaatgtt gtttgacatg acacatttga cactctgaat 240

gccaatgttg tttgtcagtt tgtcacttag cttttattat atgctcagca agatttgata 300

gaaggttgtg cgcctatttg acactctgca tgtttctttg cagttaccac ttgtaccact 360

gagagactgt tggggcattt caggccagac tgcacccgag ctgttcatca tctgtcgtgc 420

aataaactgg atccatgttg ttgcccttga ctaatgagtc gctattgtga tacatcctgt 480

gtaaatgttt tgctggctgg atgggtatcg ctggaacatg aaagtttacc ttactgatgc 540

atttt 545

<210> 3039
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316022f09b1

<400> 3039

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cgcctaaccg atgggctccc gcagcttgtc cggtccgaag gtgcctttgg gctttacaag 120

ggaatagttg ctctctgggg ccagcaaata ccttacacta tgatgaaatt tgcatgctaa 180

gagaccatcg gtgagatggg gctcacgcat gctgtggcag aaccaaaaga tcaatgcagt 240

aaaccattag aggtagcaga tgagctctga ggtgggctca ttgctggcgt cttgtgtgct 300

cgtggctatt atgctgacca caacc 325

<210> 3040
<211> 125
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316022f10b1

<400> 3040

agccggcgga acagggctgg aggtcctcta gtgggatgta ctatccaacc aagctggtga 60

ttgtccctga aaaattatgg tacagccaac tgtgagtgtc ttcgtcctgg acttgacttt 120

gccaa 125

<210> 3041
<211> 431
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316022h10b1

<400> 3041

gctgcagttc tgcactatac atacaccaaa ttttcagact taacatccag acgtgatcgc 60

tgtggatgca agcccacgaa ggaagatgtt aaaagatgtt tcatgttgga ttttgacaga 120

gcagctttta taattgcatc aacagctagt gaagaggata tgcttcgctg gtacaacgag 180

cgcgtcgtgt ggaacgataa gcagctcaac ctaaagcttc tgagaaaagg agtattaacc 240

cgcatctatg ccccaatggc gatcgtgcaa ggcctgcggg agtctggcgt cttcacctcc 300

gtcatcagag cggccgtcga caatgctaaa gttcgactga aggaaagcgt tgaccgaaac 360

agcactgatc ctgaccatga agatgaacct agggcattcg tcgcagctaa cgctaggaag 420

aantctgacg t 431

<210> 3042
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316024a09b1

<400> 3042

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caccatcctc ggcttcaaga ggtcgaagtc gaaccagtac gagagcacgt cgctggtgca 180

ggtcgagggg gtgaacacca aggaggacgt ggcgtggtac gccgggaagc gcctggcgta 240

cgtgtacaag gccaagacca agagcaacgg gacccactac cgctgcctgt ggggcaagat 300

cacctcgccg cacggcaact ccggcgtcgt tcgcgcccag ctcaagtcca acctcctcgt 360

cgagttcatg gggcgcacgg tcagggtatt catgtacccg agcagcatat aagg 414

<210> 3043
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316024a12b1

<400> 3043

ggccaccgtt gctcgcgtac cggcggtggg tgggtggcgg agtccgtcac gcgtctgctt 60

atcatgtgat ggacgctggc ggcgggggct taggcggatt acacaggacc gtggaggagg 120

cttccaccat cgggggcatc gcgacggtgt agctgatgca ctacttcatc cccacgcact 180

ggcttctgtt atccatcgtc gggcgcgccc agcgctggac gatctaccga acactactag 240

ttactgcatt tggagcagtc cttcatgttg gatcaaccgc tcttgtctgg ataactgcag 300

gtactatggc aaacactata gcaggcgagg agacagtgca taaa 344

<210> 3044
<211> 436

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316024c04b1

<400> 3044

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ggggctgagc tcgccgtcga ttccagggga gaggaggcgg caagagaggg gcggtcaccc 120

cggaggaccg aaccctatcg gccgcggtcc cccctgcatc gaccgccagt cgccgccggt 180

catggcaggg gcggcgccgg atcgggcggc gctgaccgtc ggcccgggca tggacatgcc 240

tatcatgcac gacagcgacc gatacgagct ggtgcgggac atctgctccg gaacttgggc 300

gtcgcccgcc tcatgcgcga ccgccgcacc atggagctag tccccgtcaa gtacattgag 360

cgcggtgaga agatagacga gaatgtccag cgtgagatga ttcaccatag atcactgtaa 420

catccgaaca tcatta 436

<210> 3045
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316024e05b1

<400> 3045

cggacgcgtg gggggcgagg cgagcgagca gcaactccaa caagctacgc agcacacaac 60

cctctccacc cccagcaatc catccatcca ccccaccccc accccgtttt cctcttccct 120

ccccggagga ttccctgccc gagctcgaca atggcaaacg cttcatcagg agctgggatc 180

catgatgact gcatgctgag gtgtcgggag ctcaagtcca acaggatgca ccgtttcata 240

acctacaggc tggagaacca gacggagggc attgtggacc aaactgggga gcgtgaggca 300

acctatgacg acttcaccaa gaccctacct gagaacgact gccgattcgc agtgtttgac 360

ttcgacttca ccaccccgga ggatgtgcca aagagcagga tcttctatat cttctggtcc 420

ccctgcacgg caa 433

<210> 3046
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316024f09b1

<400> 3046

atgtgttggc ttctcctccc cactcagtcc tcggttcccg gcccggttcg gttcgttagg 60

gtttagtagt ggggaagagg aggaagaatg gcggacgtcg agtaccgctg cttcgtcggc 120

ggtctcgcct gggccaccga cgaccagtcc ctccagaacg ccttgttcaa gtacggagac 180

gtcatcgact ccaagatcat cactgacagg gagacgggcc gttcccgtgg gttcgggttc 240

gttaccttcg cgtcggacga ggcgatgcgc caggcgatcg aggccatgaa cggtcaggac 300

ctgtacggtc gtaacatcac cgtgaacgag gcccagtccc gccgctacgg cggaggcggt 360

ggc 363

<210> 3047
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316024f11b1

<400> 3047

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gtcataccgg tgttatgttc ccggattttg cgttccttac acggttgggt gatttatggg 120

acccccttga ctgtttgctt tgaataaaac tcctccagca aggcccaacc ttggttttac 180

catttgccta cctaagcctt tttcccttgg gttctgcaga ctcaagggtg atctttattt 240

taccccccgg gccagtgctc gtcgtgagtg ttggtccaac ttgtcaaccg ccggtggcca 300

ccaggggcaa ctttgtgctg gcctaccgga agtttggaca attcggtgtg ccctgagaac 360

gagatatgtg cagctcctat cangatttgt cggcacagcg ggaggctttg ctggtcttgt 420

tataccattg gcgaaatgtc ttggtaaccg ggattccgag tctgatcggg tcttcctggg 480

agaaggcata 490

<210> 3048
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316024g12b1

<400> 3048

cggatgccaa cgcacaggca aagcattacg cctgtgcccg atacccgaaa aattgcatta 60

ccaccgccga tccggagtcg aagatgacca atgaacaacc agtaccgctg atgcttgtgc 120

ctgaccagga tgagttcgtg cacctgcaac tggcatggtc atggcccttc attgccattg 180

tgtgtatgag gacgagacca tagataaaga ggaagtgcgt gtccgcttgc tgtgtgatca 240

acaacaactg gacctgaatc tgaccctgac gaaagaaaaa caagaactgc ctgctgccag 300

agctaaaagc atgagctatg atgacacaag acctaagtct gaactgggca gctggtctac 360

aacgtacaga ctggtgaatc ccaaaaccct cccaactcac aactttagca gcacatac 418

<210> 3049
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316024h01b1

<400> 3049

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aggaggatgt cttgctgcgg cggcaactgc ggatgcggcg ccggctgcaa gtgcggcaac 120

ggctgcggcg ggtgcaagat gttccccgac gttgaggcca ccgccggcgc cgccgccatg 180

gtcatgccca ccgcctccca caaggggagc tccggcgggt tcgagacggc cggcggggag 240

accggcggct gcgactgcac cacctgcaag tgcggcacgg cctgcggctg ctcctgctgc 300

agctgcaact gagccggcgc ccaagaagcc cgctcgcgag gcgagcacga ggatgaagag 360

gacaactgga canngcacca ccatcaccac caccaccatn actagcccgc tgatgcgccc 420

gcccgcgcgc gcgctgaata aaataaaacc gc 452

<210> 3050
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316025b07b1

<400> 3050

aattttaaaa tttaaaaaaa aaaaagagaa aaaaaagaaa aaataaaaaa aaataaaaca 60

tgataaatag gcctggggag ttagtgtaca gacacctggc gtccccatgg tccttcgggg 120

cctttgtttt ttgggggggc cgtttttggg ttccctggtt tcggcccggc ggcctccggt 180

ttttggtttt tcttttgggg ccccttgttt gttttttcgg ggccggtttt ttccccggcg 240

gtgggggtgg cacccctggg ggccgccctt tttgtccctt ggtactaatc tccct 295

<210> 3051
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025c10b1

<400> 3051

gttttacatc tttggagcca tataagtttg tggacttgaa tgctgaggcc ccagaatccg 60

gcgacgacga ggaagatgag attgactggg aagaaggcta aagtacagcg actagttgcc 120

ccgtcttgaa ttttcatgaa gtcagatcac agtgggatgt taaatgataa taataatgct 180

gccagatgta tgcatcatat caaggcttgg ctgcaaataa cattttctc ccagatttgt 240

gaaaagttac tataatgtga agtatgatag tattgatgaa gtatgatatt gacatccatg 300

cgacgccaag gaattcaaaa gaatttgaaa gaacttgttc ccttttaa 348

<210> 3052
<211> 510
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316025c12b1

<400> 3052

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caagaccgcc gccgccgccc gtcaagatgg tgctgcagaa cgacatcgac cgtcttaacc 120

cgccggtgga gctcgagaag ctcaagcaca agaagaagcg cctcgtgcag tcccccaact 180

ccttcttcat ggatgtcaag tgccagggct gcttcaacat aacgactgtg ttcagccact 240

ctcagaccgt ggtggtgtgc cctggctgcc agacggcgct ttgcctaccc accggaggaa 300

aggcgaggct caccgaggga tgctccttcc gccggaaggg cgactaagct acactcctgt 360

ttatgtgaaa atgaaaccca ggcgaacctt acttttcaag taactaagta tccccgatgt 420

gtactgggca aattctgcta attatgcttg cccatctgcc agcctgaacg ttgnatcaac 480

gtgttctatg tcatgcactc ctgatttgcc 510

<210> 3053
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025d04b1

<400> 3053

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaa 85

<210> 3054
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025d05b1

<400> 3054

acaaaaatga aacattatta ctaagatttc ttaatcattg cgcacacatg aatgcttgag 60

ggaaatcgac ctctattagt ttatccatcc tcatgtacaa atcagagaaa cacacatgca 120

tgccctcgat cggtgtctac acggtgcatc tgtgaggaaa tctgcattta attcaccggc 180

cggccgtgtc tatttatgcg acgctgaatg atcctgcgga gttc 224

<210> 3055
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025d09b1

<400> 3055

ccgtaccaaa gctggagcga gtcccttcta gagagcccct tgagagtcgc ctgtagcttc 60

cccgatcccg cccgatcccc aatctccgac gacggcgatg ccggccggac gagagatggg 120

agaggtgtgt ggagatctgt aaatagcagg tctaggatta gatcgagtct tgcccaagtg 180

gtgtctggcg ctatgccgcg gtggagcgcg ccgccggcgc acgcgagctg cgcctggtgg 240

ctagcgtcgg cgtttctgat ggttgcggtg gcgaggtgct gcgtgcaacc ggaggaaatg 300

acggcggcga ctccttcaat aagctcgttg tgtttcctgt taaggaggag gcccggctgc 360

tcttcccttt cttttcaagc catcgtggtg gtggatggag gaagaaggag aggcggcgag 420

cttgactctg cagtttgaga aggagctcat cctcaatggg tttgagacga ggcaac 476

<210> 3056
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316025d11b1

<400> 3056

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gaccgccgcc gccgtccgtc aagatggtgc tgcagaacga catcgacctc ctcaacccgc 120

cggcggagct cgagaagctc aagcacaaga agaagcgcct cgtgcagtcc cccaactcct 180

tcttcatgga tgtcaagtgc cagggctgct tcaacataac gactgtgttc agccactctc 240

agaccgtggt ggtgtgccct ggctgccaga cggtgctttg ccaacccacc ggaggaaagg 300

cgaggctcac cgagggatgc tccttccgcc ggaagggcga ctaagctaca ctcctgttta 360

tgtgaaaatg aagcccagcc gaaccttact tttcaagtaa ctagttatcc ccgatgtgta 420

ctggtcaaat tttgttaatt atgcttgccc atttgccagc ctgaacgttg tagcaacgtg 480

ttctatgtca tgcacttttg a 501

<210> 3057
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316025f06b1

<400> 3057

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ggtgaccgtg tccatggttg gtcgtgccag cgcatacgcc gatgagcttg tcaaaaccgc 120

gaaaactatt ggatcgccag gcaggggtat acttgccatg gatgagtcga acgccacctg 180

tggcaagaga cttgcctcga ttgggcttga gaacacccag gctaaccacc aggcttaccg 240

gacccttttt gtcactacac cagggttggg aaactacata tgtggtgcta tggtctttga 300

ggagacgctc taccagtcga ctgttgatgg aaagaagcat gttgacatcc ttgtcgagca 360

gggaattttt cccggtgtca aggttgacaa gggtcttgtg ccacttgctg tttccaatga 420

<210> 3058
<211> 303
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316025f11b1

<400> 3058

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aaaatccggg tgtaccatcn cgagcgatgc cggagcgcga cgagtgacat ccaatgattc 120

accgcatgca cgctgtgtgg ctgactgctt agaacgtgag gagtcggaca acgggcatct 180

ggatggacca tgggcgccat gggccatctg tggtggaggg catgacgaat gatgaactga 240

gtgccggtct cccgtcgttg gttgaacaac tgacacctga agccagactg acggcgacca 300

aag 303

<210> 3059
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025f12b1

<400> 3059

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aaatctgggt gtctcaccgg cgacgccggt gcacgagtga accaggatgc actgatgacg 120

ctgttggctg acggctagca gtgcggagcc ggacaactgg caacaggatg gaccatgggc 180

gccaggggcc atcggtggag gggggcagaa cccaagacga acggagagcc ggtcgcccgt 240

ctctgggtga tcaacgaacc cgtgatgcga gacggacggc gaccaaagac gaactaggac 300

ttggcgctgc atagctgaaa gaggagctag gtgactcgag gcccaaggtc gtcactgtgc 360

gctggtcaca acgttacaga ctgggaaaac gctgaaagca cccaacttaa taacc 415

<210> 3060
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316025g12b1

<400> 3060

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cctgtcttcc cctggcgtgc tggggatctg gtggcgcccg tcgaacgtcg agaggtggca 120

cagcccctcc acacacttgt tcctcctcca caggatcctc aattcctcat ttaaaagctg 180

tgatatttcc ctacttcatg gatgtatgga actgcgtgaa tgggacagcg aagccactgt 240

catgaaactt gcagaatgat gatagagata tcgaaagact ctctaacatg aggtgtgaaa 300

taaaaggcaa atgcgaagct cttgcatcaa tcctcatact gattcctgca tatattccta 360

cagaactaca acatgtttgg agatgacaag atcgaacagg acggtgctct caggtaagcg 420

gtgagtgga 429

<210> 3061
<211> 493
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316025h03b1

<400> 3061

catcttcaag ctcgtcatcg tcggcgatgg cgggactggc aaaaccactt ttgtgaagag 60

gcatctcact ggagagtttg agaagaaata cgagcccacc attggtgttg aagttcaccc 120

attggatttc accactaact gcggaaagat ccgtttctac tgctgggaca ctgctgggca 180

agagaagttt ggtggcctta gagatggata ctatatccat ggtcagtgtg cgattatcat 240

gtttgatgtc acttcaaggc tgacctacaa gaatgttcct acgtggcaca gggacctgtg 300

cagggtttgt gagaacatcc ccattgtcct gtgcggcaac aaggttgatg tgaagaacag 360

catgttaagg ccaagcaggt gacattccac aggaagaaga acctgcagta ctatgagatc 420

tctgccaaga gcaaactaca ctntgagaag ccctttcttt accttgcang gaagctgggc 480

tgtgatccca aca 493

<210> 3062
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316025h11b1

<400> 3062

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aggcccgcca cacacttgtt cctactactc aggatcctga actcctcatc taaaagctgt 180

gatatttccc tccttcatgg atgtatggaa ctgcgcgact gggacagcga agccactgtc 240

atgaaacttg cagaatgatg atagagatat cgaaagactt cctaacatga ggtgtgaaat 300

aaaaggcaaa tgtgaagctt ttgcatcaat gctcagactg attcctgcaa atttttctac 360

agaactacac catgcatggc gatgacaaga tcgaaaagga cggtgatata aggacagcgg 420

agagtggagg aggaagaaaa ggtgggatgc caatcatcaa tagaatat 468

<210> 3063
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316026b08b1

<400> 3063

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tcgccggccg gccagagcag gcgcacgcag caatggggct cacggtgcgc atcgtcgtcg 120

gcgccctcct cctcctcctc ctcctggcgg cgccggcggc ggcggcgggc gagtgggact 180

cgccggagtc gtgcgccacc cctgtgagcg tgtaggcggc gtgcctgggc gcttccgtca 240

cgcaccaccg cgtggactac gagcactgcg tgcggttcct gtactcg 287

<210> 3064
<211> 496
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316026d10b1

<400> 3064

cctttgcttt actgttttac ttaccctgtg ttgtcgtcac atgttatatt ttcttgtctc 60

ttttttatga cttgttggga aaggggagcc cacaggacga cgcccggagc acgctgacgc 120

cgaggaacgc cgttaggcgc gagctgcaga ccacaatcac ggcagcgacg tctacacaag 180

cgcatcaaaa gcccgggctt aggccgccac cgtaaatccg cgaaggacca ccccccgaat 240

cgatcggcgg accggaatgc tccgttccgc atccgaccag gacgcaacgc cggcccccat 300

ccgcgttcct cccgacaatt tcaagcaccc ctcgactcta tcttcaaagc ccttctcatc 360

tttaccaccg aggcacctag cacgctaatc ggtcgctcgc ccgcatttca gccttggacg 420

gaatttaccg cccgaatggc cgccccacac cgccgaacgg cctaggcaca ggcggacacg 480

gttaccttcg cccctt 496

<210> 3065
<211> 580
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316026e11b1

<400> 3065

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ttgttttaat ttctaacata cagaccacac aatttcaact aagacaaagc caaagcatat 120

aaaacatcgg cccaagtagc aaccaaagcc cgttatggac aggacacggt ccaagccgca 180

caaggaatgg tctgtgtggt cgtgggattg taaccaccac caccttcggt gaatggggtt 240

ggtgtagtgg tgccaccagc tacaccgttt gaagagttct acgcgactgt gactgcgagc 300

tttatactct tcagcgcatt ggctcggtga tttcacagat tgaagtatcg aggaccagtg 360

gttgtgagag ctatgttcgt ggttccgctg atgtcgtact taatgtagtt ccctagtatg 420

caactcttgt agtcgttctt gcttcacttt attcatcgtg tgacccgtac cataattgaa 480

cattgtgtaa cccctttgta tcacctatgt catgtacctt ttattgagcg tatttgtact 540

attgtttcgt actttttctt gtcatcctat gctttatata 580

<210> 3066
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316026g08b1

<400> 3066

atgattagag aatccagcgt acggtttttt catagcttaa aatgctatga agaccgactt 60

attatgaact gtgatccaat ttattgaata ctccctccgt ccagaaatac ttgtcgcata 120

aatggatgaa aatggatgta tctagaatta aaagtacatc tagatacatt catttcaatg 180

acaagtattt tcggacggag gtagtatttt tttacagttc tttggaattc ttatttttat 240

gcttaacaag aatatgctga atgtcgttct aatttatctt tagtaagcag gcaaattcaa 300

attggctgaa tgttgtttca agtt 324

<210> 3067
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316026g09b1

<400> 3067

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atgatgctga cgtatgaccc tgacaagatt aagtccgtac aaaaggcgtg atcttgggga 120

tttgcggcca aagaaatttt gggcacgaga tcaagacatg agatattcag atggacgaac 180

tacattttat gatatatcaa cagaacccag gagtcggact gacggaagca gaaggcgctc 240

tgtgtgatcc gagacatgta actcaaagac gaggttgccg agcacgactg cctaccatag 300

gctcagtcca tggctctaca acacacatgc tgggataacg ctatccttac tatacgataa 360

tttctaagaa taacatctca taatattgtg atagggtaat attggatatg catatataaa 420

ctgtattttc caacat 436

<210> 3068
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316026g10b1

<400> 3068

tataccgaaa aagctgaatt atgaatactg catagataag agaaatctgg attacaaaag 60

gtctagaaca catggtttgc ggaataaaac tagataagaa cttgttttca aaaatgtaaa 120

gtacatgcta cttatagcaa aatattctga aaccctaata ctcaaaatga cgcagtattg 180

ggacggatta agaactgtac tcgacccagg tggtcgagtg gacggacgag tgataagctg 240

gagtcttctt ctctttcttg tgctcaagtg tctggttgag tgcggaatgg agaaaactct 300

gaagctggta gtctagtaag gacgtccagt gaatgatgat aagggactcg accatgtagg 360

agagtgattg gccgagtgga tggaggtggt agcactcgac taactggcag agcgaatggt 420

cgagtgaatg atgatagtga ttctcggcca tgctggcaga gtgactgaga gagcgactga 480

taatg 485

<210> 3069
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316026h07b1

<400> 3069

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gggttccgcc cgaagaagca ggggctgcag tagctgccga atcttctact ggtacatgga 120

caactgtttg gactgatgga cttaccagtc ttgatcgtta caaaggacga tgctatcaca 180

tcgagcctgt tgctggggaa gacagccaat ggatctgtta tgtagcttat ccattagacc 240

tatttgaaga gggttacgtt actaacatgt ttacttccat tgtaggtaac gtatttggtt 300

tcaaagccct acgtgctcta cgtttggagg atctacgaat tccccctact tattcaaaaa 360

ctttccaagg cccgcctcat ggtatccaag ttgaaagaga taagttgaac aagtatggtc 420

gtccttta 428

<210> 3070
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316026h10b1

<400> 3070

tcaaggttac tccccccttt catgattttg catctgagaa tcgatgctgg acagataaac 60

aaaaaaagac ccacgttctg gttgatgcat gactgtgatg tgaaggtgta aactcagctg 120

tcattcacta tgacctttta tgacataaag atatgaaaga ggcaaactgc gcaagctctg 180

atctgtgggt caatgcccaa atattaagta gagctcattc gcctttatgt tggctgtcgt 240

gaccggccta tagctgttct tgattaccta tctttattga cttgtgctat ttgacattag 300

gcttgaactg ggaccgggac ttcgtcttag caacctctat aatggaaagg aactgttttt 360

gcaagaccct acttaactaa tcaattgaaa ccttagatag atacgagaac cacgataatg 420

taatgaaact tt 432

<210> 3071
<211> 554
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316027a02b1

<400> 3071

ccctcgcgtc ctcacccgac ctcgcctccc gtcggatcgc cgccggcccc gcccgccgtg 60

gctgtccccg tcctcaccgc ctccatccaa gccggctccg gatccaggcc gctcagtccc 120

cgcccgcgcc cccacacgta aatctccgcc gcctacggcc ccgcccgtca cgacctcccc 180

gcgtgcagat ccacagtcgt cgacctaccc ggcccccgat ctgcccggcc cgcgctcctc 240

cccgtccaca gcatagaaag agggaaccca ggaacccctg tacggcctca gcttggtcat 300

aagtatttcg agaaacccca agaaatctga agaaacccgg agggagggac accacagagg 360

aggccggaca agatgatcgg cgtggggaag gcgaaacagt acgcaaacgt gctcgacaag 420

cctctcgggc gtgggagaca ggaggtcagt ttgagtgctt ttgcattcct gttctcagaa 480

ttgggtcaat acaaccagac acaagttgac aacatcgctg agctggaacg aaggctggag 540

ggacctggta tgct 554

<210> 3072
<211> 467
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027b01b1

<400> 3072

ctcacagagc tacatagcta atcacacgcc tcaccttctc ttcccggcag ctccgagctt 60

gtatgtagtg cgaggctgcc actgctagct gacacaacag cttgctcatc gatcatatct 120

catagtccgg gatcgagaga tctctaggat caacctcaag ggtagtcgac cggaggagat 180

caagcaaccc aaccgaagat gtcggtgacc tccaacaccc cgacgagggc caactcgcga 240

gtgaactact cgaacgagat ccacgacctg tccacggtgc aggacggcgc ccccagcctc 300

gccccagca tgtactacca ggagaagtcc ttcgccgact tcttccctcc ccacctcgga 360

agaaggtgat ctcggagtgg tgccgacgtt cctgctggtg ttcgtgacgt gcggagcggc 420

gtccatctac agcgccgacg tgacgcgcgt ctcgcagctg ggccagt 467

<210> 3073
<211> 528
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027b02b1

<400> 3073

ccctcgcgtc cgcacccgac ctcgcctccc gtcggatcgc cgccggcccc gcccgccgtg 60

gctgtccccg tcctcaccgc ctccatccaa gccggctccg gatccaggcc gctcagtccc 120

cgcccgcgcc cccacacgtc aatctccgcc gcctccggcc ccgcccgtca cgacctcccc 180

gcgtgcagat ccacagtcgt cgacctaccc ggcccccgat ctgcccggcc cgcgctcctc 240

cccgtccaca gcatagaaag agggaaccca ggaacccctg tacggcctca gcttggtcat 300

aagtatttcg agaaacccca agaaatctga agaaacccgg agggagggac accacagagg 360

aggccggaca agatgatcgg cgtgtggaag gcgaaacagt acgcaaacgt gctcgacaag 420

cctctcggtc gtgggagaca ggaggtcagt ttgagtgctt ttgcattcct gttctcggaa 480

ttggttcaat acaaccagac acaagttgac aacatcgctg agctggaa 528

<210> 3074
<211> 495
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027b06b1

<400> 3074

cccacgcgtc cgcccacgcg tccgatttca ccgaggaggg ggggatctcc ggcgccgggc 60

ctagcagccc aaagtcgctc cggtgcttgg cggagcccaa agtggtcagg aggatgaggg 120

ttgtcgctga gaagactccg attcagcatg tccttcaacc gccgaccatc gcctccttgc 180

tggccatcat catcggcatg gtccccgtgc tcaaggcttt cgtgtttggg gctgatgcgc 240

cgctctcgtt cttcaccgac agtttggaga tcctggctgc tgccgtggtt ccctcggtga 300

tgttgattct cggaggcatg ctcgcagaag gcccaaatga caacgcactg ggtatgcgga 360

ctatcgtcgg tataaccgtc gcaaggctcc tgatactccc ctgcattggc atcggcatcg 420

tgatgctagc agacaggttg catctgctcg tcgagaacga ccagatgtac cggttggtgc 480

tctcactgca atact 495

<210> 3075
<211> 515
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316027c07b1

<400> 3075

cccacgcgtc cgcccacgcg tccgctgcac ttgaaaagga tcgatataag atccgccaag 60

cttttgttgc agctccaggg aactctcttg ttgttgctga ttatggccag ctggagctga 120

gaatcttagc ccatcttact agttgtaaaa gcatgctgga tgctttcaag gctggtggtg 180

actttcattc tagaacagcc atgaatatgt acgagcatgt acgtgatgct gttcacgaaa 240

agaaagtact tcttgagtgg caacctcaac caggtcaaga gaagcctcca gtgccattgt 300

tgaaggatgc ttttggtgct gagagaagga aggctaaaat gcttaatttc tctattgcat 360

atggaaagac agctcangga ctatcccgtg attggcaggt gtctgtcaag gaggcaaggg 420

atacactcaa actctggtac agagatcgaa aagaagtttc agcttggcaa aagaggcaga 480

aagagcttgc tcgtgaaaaa tgggaagtat acaca 515

<210> 3076
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316027c08b1

<400> 3076

cccacgcgtc cgcccacgcg tccgctgcac ttgaaaagga tcgatataag atccgccaag 60

cttttgttgc agctccaggg aactctcttg ttgttgctga ttatggccag ctggagctga 120

gaatcttagc ccatcttact agttgtaaaa gcatgctgga tgctttcaag gctggtggtg 180

actttcattc tagaacagcc atgaatatgt acgagcatgt acgtgatgct gttcacgaaa 240

agaaagtact tcttgagtgg caacctcaac caggtcaaga gaagcctcca gtgccattgt 300

tgaaggatgc ttttggtgct gagagaagga aggctaaaat gcttaatttc tctattgcat 360

atggaaagac agctcaggga ctatcccgtg attggcaggt gtctgtcaag gaggcaaggg 420

atacactcaa actctggtac agagatcgaa aagatgtttc agcttggcaa aagaggcaga 480

aagagcttgc tcgtgaaaaa tgcgaagtat acaca 515

<210> 3077
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316027d03b1

<400> 3077

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ttattgggtg acaacatata caacttcggg gagttgcttg cccatccaat tatccacagc 120

cttgtgggaa catcggtgga gtggatttat catatattgc aagcgttcaa ctctggcaat 180

ctagcgtcct accaggaact ctgcaaagtt cacgccgccg ctttgagtgc gcagcctgct 240

ttggtacaga aggagaggga acttcttgaa aagatcaata tcctttgctt gatggaaatc 300

attttcagtc gagcatccca agaccgtaca atcccgttga gcactatagc tgaacagacc 360

aggctctcag ttgaagatgt ggagtatcta ctaatgaaga gcctctctgc tcatcttatc 420

gaatgcatta ttgatggngt cgacgggact gtccatgttt catgg 465

<210> 3078
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316027d10b1

<400> 3078

tcgctcacac gtggggttga tgccggtgct catggcgatc ggcaaccggt cccgcgacag 60

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ggagctcggg ggctactgct tgagctactc ctacgtcatg gcgaacatga tggaggacag 180

gaggtgcagt tacgagagtg ctcaggtgtc tagcgagatg ccaacgacgc cgacaacgga 240

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ggaagcggcg ccgggagcgc cgaacggagg gat 333

<210> 3079
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316027d12b1

<400> 3079

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agaagacaat ccgttggagg gaaacttttc acatacttac attgcaagaa cttgagaaat 120

ggtcccattt ggtcttttgg catgggtttg acactacact tcggccttgc ttagtaatcc 180

gtcttggact cgcgtgctct agcatagccc ctcgtgatag accttgtttt gggcaagcag 240

tagtttctca gattgaccat ggtattatac atttgaccaa cgaagaagat ccaagaatta 300

ctgttttgct ggattgccac gggatttctc cattcaaatt tccgatgcaa atgatgaggt 360

cgcttgtcaa cttggttcaa gaaaactacc caaatcgtct tggagtatta attgttgtcc 420

gtctttctcc agttgtcaga gttattgcac agactnttat tcaac 465

<210> 3080
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027e01b1

<400> 3080

ctctctgagc tacatagcta atcacacgcc tcaccttctc ttcccggcag ctccgagctt 60

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catagtccgg gatcgagaga tctctaggat caacctcaag ggtagtcgac cggaggagat 180

caagcaaccc aaccgaagat gtcggtgacc tccaacaccc cgacgagggc caactcgcga 240

gtgaactact cgaacgagat ccacgacctg tccacggtgc aggacggcgc ccccagcctc 300

gcccccagca tgtactacca ggagaagtcc ttcgccgact tcttccctcc ccacctcgga 360

aagaaggtga tctcggagtg gtggcgacgt tcctgctggt gttcgtgacg tgcggtgcgg 420

agttcatcta cagcgccgac gtgacgcgcg tcttgcagct gggccagtcc gttg 474

<210> 3081
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027e02b1

<400> 3081

ttttcgtctt gagcgtgcat tgcggtacgc aggactgtgt tgcgcacggt ggcgggaaga 60

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atggtggtgg caagagatgc aggttcgacg gttgggtgaa gagtgcgcag agcagcactg 180

atttctacac agagcacggg ggatgccaag cgctgctaat gggggctgcc ggactctagc 240

ttgtgtcttg gtacaaagaa ggatgctaa 269

<210> 3082
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027f01b1

<400> 3082

gttttgagtt tcttaactaa tcacaccgcc ttacctgtct cttggccggc gagctcctat 60

gcttgtatgt agtgcgaggc tgccactgct tgctgacaca acagcttgct catcgatcat 120

atctcatagt ccgggatcga gagatctcta agatcaacct cacgggtagt cgaccggagg 180

agatcaagca acccaaccga agatgtcggt gacctccaac accccgacga gggccaactc 240

gcgagtgaac tactctaacg aaatcgcaaa cctgtgcacg gagcaagacg gcgccccgag 300

ccttgcgccc agcatgtact accaagagaa aggcttgggc gacgttttcc ctccccacct 360

tggaaagaag gtgatctcgg agtggaggcg acggtccatg tggcgttctt gacgtgcggg 420

gcggcgttca tctacagcag caacgtgacg cgc 453

<210> 3083
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027g08b1

<400> 3083

tgcctgccca atcagggcaa tgaagatctc tgtgtcccct gttgtgcgtg ttgccgttca 60

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tgaccctatg gttctctgta acattgaaga gtctggcgag catatcattg ctggagctgg 180

agagcttcac cttgtaatct gtttgaagga tctgcaggag gactccatgg gtggtgctga 240

aattattgtt acccctacca cagtatgctt acgctagact gttcttgaga agtgcctgcg 300

cactgtcttg aacaagtctc gcaacaagca taaacgtctt tacatggatg ctcccccatt 360

ggaggaggga ttggctgaag ctattgatga t 391

<210> 3084
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316027h06b1

<400> 3084

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aagaagccgg tggagaagac cccggcgggc aagaagccca aggcggagaa gaaggtgccg 120

gcgtccaagg agggcggagg cgagaagaag gggaagaaga aggccaagaa gagcgtggag 180

acgtacaaga tctacatctt caaggtgctg aagcaggtgc acccggacat cggcatctcc 240

tccaaggcca tgtccatcat gaactccttc atcaacgaca tcttcgagaa gctcgccggc 300

gagtccgcca agctcgcgcg gtacaacaag aagcccacca tcacgtcgag ggagatccag 360

acctccgttc gcctcgtcct ccccggcgag cttgccaagc acgccgtctc tgagggcacc 420

<210> 3085
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316027h08b1

<400> 3085

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gaccctgatg cagtcaatgt ggcgtacaac atggcgccta tcagtggcca cttggttctc 180

ctatggatgg atctgcatgg acgagatgat gaactgagag gccctcgttc gctccgttgg 240

cgatcaatgg aacaccaact gtaccctgac ggagacctga gagggactag cgatgaactg 300

gggctacctg tgagaggact ttgataacac ctggcctaca ctaggcactg gccggcgact 360

gacaccgttt tgactgggaa aacgactggg aaaaccatgt taatacccat gttaaacatc 420

ct 422

<210> 3086
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028a04b1

<400> 3086

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ctgtttgcga aaaataccgg gaagatcttc cagactgact tccatccagc ttatgatcca 180

aatggattga tcgagttcag tgagctagtt ccatttaggc tgacacgcaa catgcaagct 240

ttcttctcaa attttggcgt tgaaggtctc atcgcttctg ccatgtgttc tgctgcccag 300

tctgtggttt cacctaaaca aacccaacac atatggcatc atttggctat gtttttccgc 360

gacgagctgt tatcttggtc atggaa 386

<210> 3087
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316028a05b1

<400> 3087

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ccccgccgcg ccgacgcgtg gggcaaggag ggccacatca tggtctgcaa gatcgccgag 180

aagtacctgt cggaggaggc ggcggcggcg gtgcatgacc tgctgccgga gtcggcgggc 240

ggggagctgt cgacgatgtg cccgtgggca gacaccatgc gcttccgcta ccactgggcc 300

agcccgctcc actacgccaa caccccccaac gtctggaact tcaacttctc ccgggattgc 360

cacaactcac gcggtgagca ggggatgtgc gtcgtcgggg cccataacaa ctacacggac 420

cagctctaca cctacgggga ctcccccaag agctcgta 458

<210> 3088
<211> 525
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316028a08b1

<400> 3088

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agaggaagtc aggtaggagg ctctgctgcg aagggagatg gccgggaagg gaggcaaggg 120

gctgcttgcg gcgaagacca cggcggccaa gggcgccgcc gacaaggaca aggacaagaa 180

gaaggcgcct gtgtcccgct cctcccgcgc cgggattcag ttcccggtgg gccgtataca 240

caggcagctc aagcagaggg tctcggctaa tggccgtgtg ggtgccactg ccgctgtgta 300

ctctgcagca atccttgagt accttactgc tgaggtcctt gagctggccg gcaacgccag 360

caaggatctc aaggtgaagc gtatcacccc tcgccacctg cagcttgcga tccgtggaga 420

tgaggagctg gacaccctca tcagggcacc atcgctggtg gtggtgacat ccctcaattc 480

acaagtccct atcacaagac ctcaggagtg atgaaagcaa taccg 525

<210> 3089
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028e04b1

<400> 3089

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acgtgaggtc accatggata cagcaggccc gccaaggggc gtctgccctg cttcatgtca 120

tacatgttcg acatagggggg cagggcatgc taataaaagt tctgtttgcg aaaaagacgc 180

ggaaggacct tccagacgag actatcatcc agcttatgat ccaaatggag tgaacaactg 240

caccgagctg gctgcatttc ggctgccaca gaacatgcgg gccttcttgt gaaatatcgg 300

cgagaagggt ctgatcacac gtggcctgag ctctgctgtg cagcgtgtgg ttccacctaa 360

acaaatggga acacatatgg cattaccca 389

<210> 3090
<211> 223
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028e05b1

<400> 3090

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atccgcgccc ggatctcccg ggccggcggc gatggcgctc tccgatctct cccgcgactc 120

gctgctcccc agcttactgt actccccgag ctccttcgtc gccgccgtct tcgcgcgctt 180

gcactgctcc ccgtggccct accaggcgcc cgacgaggcc ccg 223

<210> 3091
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028e11b1

<400> 3091

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cagaggtcat ctatgctggt cttgatattg tgactccctt gatatctttg gatcttctca 120

agtaccctaa actaagtcgt gattattttg tacttatgtc gcacttgttg gaagtgcacc 180

ctgagaaggt tgctcactca aacagggatg cttttggaag aattactggt agtcttgaat 240

ttggcctgcg taatcaggat ggcgatgttg ttgagaggtg cctcacagca ctaaatgccc 300

ttgcctcgta ccatttcaaa gaaagacttg gaggcatagg agggcttggc tcgcaggcta 360

tggaatctga aggatcgaat gggaaacttc aggaaagcat atcaagtcac ttcttgaggc 420

ttctactgca actacttct 439

<210> 3092
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028f11b1

<400> 3092

gacgcgccct gcagcggcac attaaacacg gcggtgttag cgaactcact cagcttgacc 60

gcttcacttg tcagcccccct agcgcccgat 90

<210> 3093
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316028g07b1

<400> 3093

gcaccatgag tctctcctgg aggcgcttgc tggtgacaac gttggcttca atgtcaagaa 60

tgttgccgtg aaggatctga agcgtggttt tgttgcatcc aactccaagg atgaccctgc 120

caaggaggca gccaacttca cctcccaggt catcatcatg aaccaccctg gtcagattgg 180

caacggctac gccccagtgc tggactgcca cacctcgcac attgctgtca agtttgctga 240

gctggtgacc aagatcgaca ggcgatctgg taaggatctg gaggccctgc ccaagctcct 300

caagaatggt gatgctggca tagtgaagat gattcccacc aagcccatgg ttgtggagac 360

ctttgctact tacccacctc ttgggcgttt tgctgtccgt gacatgaggc acact 415

<210> 3094
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316028g10b1

<400> 3094

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cgtacattct gtggtgcaaa gaccagtggg cggagatcaa gaagagcccc gatgcacact 180

tcaaggaggt gtcgaacgcc ctgggcgcca aatggaagac cctgagcagc gaggagaagc 240

atccgtacga ggagaggtac cggcaggaga aggaggccta cctgcaggtg gttggccagg 300

aagatgcgcg aggacgatgc gattaagctg ctggacgaag agcagatgct ctggactgcg 360

aaagaaattg ctgaacagt 379

<210> 3095
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316028h04b1

<400> 3095

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gaactagcat tttaattaca aaattcagtc tttgatcacg ttatttcagt ttcattatag 120

accttataat attttttatg cattaatata aggtttataa tattttgtgg agcaatcagc 180

tgtgcataga aaagagctca cctaaattaa tgacacgttc atcttatctt cgattaaaaa 240

aatttgcccc ctaatattca gttctactga gagttgtaga aggcaaaaat ccagcatatt 300

aactcaagta agtgtttttg gtatttccca acgtaattaa aaaatttctt ctcaaaatac 360

gacatggtca ttgtcggaaa aagatattta gcatgaatgt aggtgctctc atatgaagct 420

ggacatgttt acaatgatcg 440

<210> 3096
<211> 485

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316028h08b1

<400> 3096

ttggattgct ggaattatat ttatgcatga gcaagactac aatgaggctc tcaagcacac 60

acacactggg gggactctgg acctgcatgc actgaacgtc caaatcttcc ttaagatgca 120

ccggtcagat tatgctgaca aacaactgaa gatcatgcaa caaactgacg aggaccatac 180

actgacacaa ctagcaaatg cttggctcga tattgctgtt ggtggctcta agatccggga 240

agcttatctc atattccagg actttgctga aaagtaccct atgaccggaa tggctcttaa 300

tggcaaggca gatcgctgta tgcatatggg gagctttgag gaggctgaaa ctctattgct 360

tgaagcccta aacaaggatg caaaaggatc ctgaaacttc ttgcaatctt aatggatgta 420

atctccacct tggcaaaccg tcggcacgat acttcagcca gcttgaagct gcgcaccctg 480

atcac 485

<210> 3097
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316042a04b1

<400> 3097

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ctccggtccg tgcaagcagc cgcagagccc gcctctagta ccgcaaggaa aggagggtaa 120

aggaacctgt tgcccccaat ggcttcctcg cgcgccgccg ccgggccctt cgcgctctgc 180

attctgctgc tcgcgtcccc ggccgtctcc gccacgttcc tgttcgacgg cgggaagtcg 240

gcggcgaaga gcaagggcaa gggcaaggag gcggtcgacg tggagtggcg gccggccacc 300

gcgaacgtgg taccggcgaa agccgagggg cgacgggcag c 341

<210> 3098
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316042d07b1

<400> 3098

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taaaccgtca caagtctcag gctagcaagt tgccactttc aacggctcct agtgctaacc 120

tcattgggaa agggaaggca gaggcagcaa acaagcagac agaggcaatg gacttccggg 180

attggtgcga cagcgagtgg tccaggctca ctggaacaaa tgatacaagt ttccttgagt 240

tctgcattaa gcagtcgact gctgaagcag aaatgcttct ccgggagaac gttggctctc 300

ttgaccgcaa cggtcagttc atcgacaggt tcctcaacta caaggctttt ctgtccacag 360

atgtgatcga gatggcattc agagcgccca gcaaccgcgc tccccgtctg aaccccgctt 420

ctgcagccaa aggagggcca agtgccgagg cagagcatga tacaggagga aagaaaaaag 480

ggaagaaagg 490

<210> 3099
<211> 461
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316042e04b1

<400> 3099

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tcacagtgca tttgcatgag aagcccttca caagaaaaaa ctatacattc acatttttt 120

ctgcggaaac tatatattta cttattattc agagctcact gtataaaatc cgagtggtgc 180

tcaagatgtt aattaactag ctttgtgaat ggggtggtga aaaatactgc tcactttatt 240

tgtttggtcg caagcctata tcatgtacac atactgctca atttatttga accttcagaa 300

aataaatcaa tttgctcaag cctttctgct gttgattcca gntcattgga gtaactttaa 360

tatttcttct cattgcatca gttaacatga atgcaaaata atttgttggt ctatgcgatc 420

ccgtttangg atgatgccac taagttgcta taattatgct t 461

<210> 3100
<211> 460
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316044c05b1

<400> 3100

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aggcacgtag acgtagcgan nccgccgcgt ttactggcgt gcttcggcag gggcggcgcg 120

acggcctcgg cgccggagcc tgtggaggac ctggccccgg gcccggtgct ggtggagctc 180

ttctcctcgc aggggtgcgc ggcgtcgtct gaggcggacg cccttgtggc gcggctggcg 240

caggagtcct ccgaggccgg cggcggcgag cgagcgatgg tggtgctggg gttccacgtc 300

gactactggg actaccgcgg gtggaaggac cccttcgcgt acagcgcctg gaccgtgcgg 360

cagaaggcgt acgtggaggc gctccggctg gacacgctct tcacgccgca ngtcgtcgtg 420

caaggccgcg cggactgcgt cggcaccgag caggacaagc 460

<210> 3101
<211> 330
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316044c09b1

<400> 3101

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ccggtcaccg nnnnaggggt cgtcgtcggt ccaccggtca cctacccgtc catcaccaac 120

cctccgtcca aggggcccac cccgcgcccg acggtcacca ctcctaccgt cgtcgtcggg 180

ccgccggtca catacccgc gccaccggtg atcgctccct gcggtcacca ctccaccgtc 240

ggcgccggcc accactccca ctccaccgtc tccgtcggtc accgctcccc cgtcgacgcc 300

ggggaacact cccccgtcgt cgacggggtg 330

<210> 3102
<211> 400
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316044d04b1

<400> 3102

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tatgctttcg acanccnnna ccacatcgga attgagctgt ggcaggttaa gtcaggaact 120

ttgtttgaca acattctcat caccgacgat gctgctttgg ccaagacatt tgccgaagag 180

acctgggcca agcataagga ggctgagaag gctgctttcg atgctgctga aaagaagaag 240

gaagaggagg atgcttccaa ggctggtgag gatgatgatg acttggatga tgaggaagcc 300

gatgaggagg acaaggatga caaggctggg tctgatgcgg agtctgatga cgagatgcac 360

gatgagctct agatggatgg cgaggaaaga tgagaggagt 400

<210> 3103
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316044d07b1

<400> 3103

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cgtcgtnnnn nnccatggtg tggaggtgac taacactgtg ccggctgtca cccctgaggt 120

taaggatgcc ctggtcaaga acataaggag gagaatgaca ccacagccac tcaagattcg 180

tgctgatgtt gagatgaaat gcttccagtt tgatggtgtt ctccacatta aggaagccat 240

gaggaaagct gaagctgctg gaaatgctga ttgccctgtg aagattaagc tagttgctcc 300

tccgctttat gttctgacca cacagacact tgacaaagac caggggatag cagttctgac 360

aaatgcaacc aaagtttgtg cagaggcaat tgaaaagcac aaggngaaat tggtggtgaa 420

agaagcagcc agagctgtga gcgagagaga 450

<210> 3104
<211> 541
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316044f07b1

<400> 3104

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cacaggcgat gaccgccgcg gcggccgtcg tggtcctcgc ggggggttcc ctcgcatttc 120

tgggccggtg cctcgtcgcc agcgcgctcg tagttgccgc cagcaacacg taccttctct 180

gcagagtcgt ctacaaggtg gcagtcgtcg ccggtgggca cgtcctcgac gtctggaccc 240

acatctccat cgcctcctcc ttcttcgcct tcttctgcgc cagcctcgcc gccgacctct 300

cggtctaacg tcgccggccg tcacctttag tagcgtaaat aagctggcct tgtagcgcga 360

gttcggttca ctctcgctct gccgcacacc ttgctgtttg catgtactac gtagagccat 420

aagtgccagc tcgcagcatc gatctatctt cttctacggt tctaccaagc aacactacat 480

ccatggatct tagtgattat acagtaatng gcataattac tggaagtaga gtattattct 540

t 541

<210> 3105
<211> 477
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316044f08b1

<400> 3105

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cgtcatggaa tatnnncaga cccgagactg tggaatcact catgtacctg gggcgcctta 120

cggggaacaa aacataccaa gattggggat gggacatatt ccaggcattt gagaagaact 180

cccgcatagc atctggatat gtgggactaa gagatgtgaa tagtggtgaa aaggacgaca 240

agatgcagac cttcttccta gcagagacgc tcaagtacct ctatctgctg ttctcccctc 300

cgtcagtcgt atctttcgac gagtgggtct tcaacactga agctcaccct atgagaatcg 360

ttccaacaca tggtagcaac ggccagtcaa ttgaaactgg aacaccagtg gtccgaccgt 420

tcggtaggaa gcaagggaaa caggngtagg cctgaacaac agagcagaga atttttg 477

<210> 3106
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316044g05b1

<400> 3106

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gggaaggccc aacggagggc ctcacacacg tctccacagc ggtggttggc accctggggt 120

acgcggcacc ggagtacatc cagacggggc ggctgaacgc caagagcgac atctggagct 180

acggcgtgct gctctacgag ctcatcacgg ggcggcggcc catcgacggg gagcggccga 240

ggggcgagca gaagctgctg gactgggtga agccctacat ctccgacacc aacaggctgc 300

ggctgatcgt ggaccccaag ctggagggcc gctacagcat caagtcggtg gccaagctgg 360

tcaccgtcgc caaccgctgc ctcgccaggc tgcccaaggc gcgctccagg atggnggagg 420

tgctggacat ggtgc 435

<210> 3107
<211> 374
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316044h05b1

<400> 3107

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gtcaccgnnn gnnccggggc gagctccggc ggcctggaga tggcggcgga gaacggcggc 120

tgcggctgca cccagtgcaa gtgcggcacc agctgcggct gctcctgctg cagctgctag 180

atcgatcatc gaccatatgc atgcaccgtg ccgcgcgtgc atcatcgatc atatcgatct 240

actactacca taccatgtaa ccgcaacctg atcgagggcc tttatctatg cacctgacct 300

gcatcagcag tcaggtgcca tgccatgatt gtaaacaggc ccccctaaat aaaatttccc 360

ctgattaact cttt 374

<210> 3108
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316044h10b1

<400> 3108

tctagcaatt ttttaaggac ccatctggga taaaagttaa cgcaaccaag tccatgatag 60

ggcattgcct aggtgcagca ggtggtttgg aagccattgc tactattaaa gcgataaaca 120

ctggcttggt gcatccgagc ataaaccagt ttgagcggga gcctgcggtt gaattcgaca 180

cggtacccaa cgtaaaggtc caacatgaaa tcaatgttgg tatgtcaaat tgctttggat 240

ttggaggaca caactcggtg gtcgtattca ccccattcaa gccttaatgc ggtacatgct 300

cgacgaatct tggccagaac agtggaggtt ttttttcagg aagctcttga gttatttcga 360

tgtggtctct tccgggaagc aactgacgat ctgacaggca gcaacattac agtgaacaga 420

ggatccaaga tccattgcat tttagataca cccatccgat tcgatttgaa aca 473

<210> 3109
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045a01b1

<400> 3109

cagtgggaca cgcccgagta actggcacta cgcgcggcgg atgtggagat acgctcaatg 60

acaccaggt 69

<210> 3110
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045a12b1

<400> 3110

tctggcagct gctggggagg cctctgcagt cctacatctc caggtcgtct tcctcccgga 60

agtccccctt cgtcgtcagg gcatcgtcca gccccccctgc caagcaaaat gacaacaggc 120

agctgtggtt cgcgtccaag cagtccctca cctacctcga cggcacgctg cccggtgact 180

ttggtttcga ccccttgggg ctgtccgacc cggagggcac cggcgggttc atcgagccca 240

ggtggctggc ctacggcgag atcttcaacg gccggaccgc gatgatggtg gtggtgtgca 300

tgatcgcccc ggaggccctg agcaaggtgg gcctggtgcc cccggagacg gcgatcccgt 360

ggttccaggc aggcgcgatc ccgacggagg gcacctacca gtactgggcc gacccataca 420

cgctc 425

<210> 3111
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045b03b1

<400> 3111

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atggtactcc aataatctga tcaagcacgg tgacaagatc ttggatgaag caaacaaggt 120

cttcttggga cacagagtgc aactggcaat caaaatctcc ggcattcact ggtggtacaa 180

ggctccaagc catgcggccg agctcacagc tgggtactac aacttacatg acagagacgg 240

ctacagaccc atagcacgca tgctcaaaag gcaccatgct agccttaact tcacttgcgc 300

cgagatgagg gactcggagc aaagctcgca ggcgaggagc gcaccagaag aactagtcca 360

caggtgttga gtgctggttg gagagagggc ctaaatgtgg catgcgaaaa cgcacttcct 420

cgatatgatc caactgctta caacaccata ctcaggaatg cgaggcctca tg 472

<210> 3112
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045b05b1

<400> 3112

taacattttg ggagctgtgt acagatacaa gaagttaaag gaaatgagcg cagcagacag 60

gcagaaggtt acaccgcgca ctgtcatggt aggagggaaa gcatttgcaa catacaccaa 120

cgccaaaaga atagtgaaat tggtaaatga tgttggtgct gtggtgaaca acgatgctga 180

cgtcaacaaa tatctgaagg tggtgttcat tccaaactac aatgtatcag tggctgaagt 240

gctcattcct ggcagtgaac tgtcacagca catcagtact gcaggcatgg aagcaagtgg 300

aacaagtaac atgaagttct ctctgaatgg ctgtgttatc attggaactc tcgatggagc 360

caatgttgaa atcagagaag aagtgggaca agacaacttc ttccttttcg gtgccaaagc 420

agatcaagtt gctggtctga ggaaggatag agaaaatg 458

<210> 3113
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316045b06b1

<400> 3113

ttgatgaacg aggtggagcg ggtgagcaag gcgcactacg cggcgtgccg agaggacaag 60

ttcaaggagt tcgcggcgaa gacgctggag gccggcgaga agggcgccga cgtgaaggac 120

gtggactggg agagcacctt cttcgtccgc cacctccccg cctccaacct cgccgacctg 180

cccgacctcg accaccacta caggcaagtg atgaaggaat tcgcggcgga gatcgagaag 240

ctggcggaga aggtgctgga cctgctgtgc gagaacctgg gcctggagca gggctacctg 300

aagcgagcat tcgccggttc aaggggcccg acgttcggca ccaaggtgag cagctaccca 360

ccgtgcccac gccccgacct ggtcgccggc ctccgcgcgc acaccgacgc cggcggcgtc 420

atcctgctgt tccaggacga ccaggtgagc gggctccagc tcctcaggat ggaaca 476

<210> 3114
<211> 501
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316045d03b1

<400> 3114

ttgaacaagt ccatgagtta ccagccttgt gatcaagaag gtgatcctct tccagggacc 60

gagctaaaag aggtctggaa agccgctcct gctccaccga atgacaagta ccagtataca 120

tactttgcgc acaaaataaa tagctttgat acagcaccta agaagctctt gccttcagac 180

tcccgattaa ggcccgacag atatgccctt gagaagggcg acatgtctaa atctggggca 240

cacaagagca ggcttgaaga acaacaaaga gctgagaaga aaattcggga caccaagggg 300

gagcaattta ctccaaaatg gttcaaaatg accgaagaca tctcccctac gccgtggggc 360

gatctggagg tgtatgagta caatggcaga tacgccgagc accgggctgc gatagacagc 420

tctagcgtcg ttcgcgagga gacagacgtg agctccatcg agttcaaccn gtggcagtat 480

ggtgactcgc cttcccaatg a 501

<210> 3115
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316045d09b1

<400> 3115

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atgctgcagg agcctgccgg agcgggccac gccaacggaa acgccgggcg gcgccacgag 120

gggagcttcg tggtctggca gctcgcgccc ggcatgtggc tcgtcgagat ggccgtggcc 180

ggccacagcg tcgccgccgg cagcgacggc cgtgttgcct ggcgccgcac gccctggctc 240

ggcgcgcacg ccgcgcgggg cggatcgcgc ccactccgac gcgcccttca gggcctggac 300

ccggtgatga tcgcgtccat cttctagacg gccgagcacg ccggcgagaa gcatgtcgac 360

ggggaggact gtttcgtgct gcgcctcgac gtgggcccct cgacgctgtc gagctggagt 420

gaccgcacgg cggaggtgat ccg 443

<210> 3116
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316045f06b1

<400> 3116

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actaaaaact aacacctgat atgttcctat cccgggcggg cggtcttatc tatcccctcc 120

tccgtccccg tccctgcgcg gccgtgtctt ttcttttgtt tggccttgct tgacttcctt 180

ggccggcccg ttgctccacc gcgccgggat ttccccctcc ctgccccacc ccaattgctt 240

tgccttgcat ccccctccct tttggtgggc gtttgttgac acgaggcgtc ccgttccccc 300

ttcccttcct tt 312

<210> 3117
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045g05b1

<400> 3117

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ccgcggaggc tgcagctggc acggaccgcc gcgaggccag cgaggcgcgc gctggtggtg 180

gaggcccgcg ggggcagggg ctggtcggac cggcagtccc agcagcagcg gcgcatgccg 240

cagctcccca agatcgagga cgacggcaac ccccgcttcg tcatcttcat ccgcaccgcc 300

aatgtgtact tctggtaccc gctcaacatc gtcaccggcg gcaccaccgc caagatcatg 360

ctcgccgcca ggacaacttc ctcggcaagt acatctacaa ggacacgctc gcccggaaac 420

ctcgcaccgt catttacaaa gacgaggacg acata 455

<210> 3118
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316045g07b1

<400> 3118

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agacccagga cggggtcccg accacccaca tggcgaaggc acggcccggc cgagggcaac 180

gctgcgctgg ggaggaggcc aagacaaaag atgaacggac cgccccccac cgcgggcgga 240

gagaacaacc gaaccgcgag gccgaccgga cggagacaaa agaagaaccg gcgcgcggcg 300

gggcagaacg aagagagggg ccacga 326

<210> 3119
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046a02b1

<400> 3119

cgcggataaa caagctggac tctacgaaag acaaagaaca aaagtctgta gggtcctact 60

actacctgtg atacaggcac cacggttgat actttggtac cgttgcaact gcaacgcact 120

ctgcctgggt tgcttgttgc tggagaagaa actgaactgg atttgtccaa aggggaggcg 180

agacacggca agggagcgac ggctggagcg tctcgaggag caagacaaca tggaggacgt 240

cggagcaagg agacaggcca acgccgccag caggcggagc atgctaacct cccatggaat 300

ctggtgaagg aatgcagaga aagggaagca tgaagtgctg caaggttgga tcggatcaag 360

gagcctgcgc cagaagatgt aatcccaacc tttcgaaccc ctcctgaacc tggagtgttc 420

tgtcgggctt cggccacagt cattgcagga tgctgtgaga tgaatcacac gtttgatg 478

<210> 3120
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046a10b1

<400> 3120

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ttctgctcgc cgtggcggtg ggcggcgcca cggcgcaggg cgtgggctcg gtcatcacgc 180

ggtcggtgta cgcgagcatg ctgcccaacc gcgacaactc gctgtgcccg gcccgggggt 240

tctacacgta cgacgccttc atcgtcgccg tcaacacctt cccgggcttc ggcaccaccg 300

gcagcgccga cgacatcaag cgcgacctcg ctgccttctt cggccagacc tcgcacgaga 360

ccaccggagg gacgagaggc gctgccgacc agttccaatg gggctactgc ttcaaggaag 420

agataagcaa ggccacgtct ccaccctact atggacggag acccatccaa ttgacagggc 480

ggtccaacta 490

<210> 3121
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046c01b1

<400> 3121

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cgaggacgtg tacgagcacg tagagcaggc atggtcacgg ggcgccaggg ccactgagtg 120

gaggaggccg agacgaagga gaaagaggaa gtgcgcgcac gcccgcgggg ggagcaagag 180

caacgggacg gaagactgag ggggacgggg gcagaacagg aactgggagt ggaagaggcg 240

aaagaggagg aggaagacgc cagaacgaag gccgaaactg gcagtggcca aacaacgaca 300

agagtgggaa aagggaagaa gcaggcaaca gaaaagacat gcggcaaaca cccaatcccc 360

cagccggcgg aagagggaag agggccgaag cgagcgccca tccaac 406

<210> 3122
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046c11b1

<400> 3122

tccactgtct tccgggtaat ttccattcct ttgtagtaca ttctctgcta ttgggatgcg 60

tgaattgtga tactcctacg tttaacaatt tatatttatg atggcttctc tctttgaat 119

<210> 3123
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046c12b1

<400> 3123

tctccactct tccggttgtg aggacaaagc cacccaccca ccaagagtga gtctctcccg 60

gtcccggctc tccctccctc cctcccctcg tgcggtagcc tccaaatcat gcaacgtcca 120

atccacttcc aacaagatac cgccaccatc ctgcgcctga tccgacctct cttccatcag 180

cgacagcgac ctcgcaaccc ccggctccat cgggcgaggg aatggaggag gagggcgcga 240

ggaaggcggt gctcttcagg ctgttcggcg tcgaggtccg cggcgcggag gaggatgatg 300

acgcggagcc catggagctc aagaagagca ccagcatgcc caacctcgcc tgcgcctaca 360

tcgtgccgat tctcctgccc ggcgaggcca gcaacgacaa gggctacg 408

<210> 3124
<211> 294

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046d07b1

<400> 3124

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gtcagaaaga agaaacagca gaagcaagga actgtgccta gtaaccggtt tggtgtcatc 120

ttggagtggg agggagttgt tgtggaagat gatgatcctg acctggaccc cctggtgtgg 180

tacgttctgt tactggacaa ggcgacaatt ttttcttccg atgaaatgct gaaggaaatt 240

gagggaatga gaactgacca ggctatttaa gaagtcttta gttggtcgaa agat 294

<210> 3125
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046e09b1

<400> 3125

aatccccgaa aagctcccac ttttcaccca ttttttccggc tggtcaagat aacgggggtg 60

acagagaaca cctagggctg gtgcctgaac catgtgaggt gaatgtcaaa cagactggcg 120

caatgcatgg gctgtccgag cccatgagtc actgtggagg atggcatgac gaacaagcta 180

ctgctctacc ggctccactc gatgggagaa caactggacc gtgatgtcaa tcaggcagct 240

acacaggaag aacagacgca acgagtggta acactgaaag aggagccata tgacatgctg 300

cccaagctaa ccactgtacg catgtaacaa 330

<210> 3126
<211> 526
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316046f03b1

<400> 3126

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gggcaatgcc aacagcagcc acaacaacag gtgaacacat gcgctgctct cctgcagcag 120

tgtagcccga caccatatgt ccagtcacaa atgtggcagg caagcggttg ccagttgatg 180

cggcaacagt gctgccaacc gctggcccag atctcggagc aggctcggtg ccatgccgtc 240

tgcggtgtgg cccaggtcat catgcggcag cagcaagggc aaagtttcgg tcagcctcag 300

cagcagcaag ggcaaagttt tggccagcct caacagcagg ctcccattga gataagaagg 360

atggtgcttc agacccttcc atcgatgtgc aacgtgaaca tcccgcaata ttgcaccacc 420

accccatgca gcaccatcac tcagacccgg tacaacgtgc ctatggccac tacctgtgat 480

ggtgggacct gctaagatct gtgatgcgct aactagaccg acacca 526

<210> 3127
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316046g03b1

<400> 3127

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gagaagaagg gcctgctggg caagatcatg gacaagctgc ctggttacca caagacaggg 120

gaggaggaca aggccgccgc cgctacaggc gagcacaagc ccagcgcttg atcgccgccg 180

tgcccgagac ccgtgaccgg acctcgattg aattgttggc gtgtgttgtg tttgctttac 240

gtctaagttg gtgtcaaggt gggaggggtt cgatcgtctt tgaaggtccg gtccgtgaag 300

cccgttcagt gacgggtgct tctgtttcag tttgcttcag agtcaggtcc tggatgttgt 360

caagtttgtt tacttatggg cacttgtgta ttggcttatt gctgggcatt ttgccttgat 420

a 421

<210> 3128
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316046g05b1

<400> 3128

ccttaggtta attgagatga agaagagagg caagtctgat atggatgctt atgggtatgc 60

tagtatcgca ggcgaaaacg atcaagatcc tcctccagaa aatgtttcag ttcccttgcc 120

tgacatggtg ctgcctcctt catttgattg tgacaatccg acataccgtt accgctttct 180

ggaaccaacc tctactgtcc ttgcagggcc tgttctagat gcgcatgggt gggatcatga 240

ctgtggctat gatggagtaa gcgttgaaga gtcgcttgct ctccttaaca aattcccagg 300

tactgtggca gttcaggtta ccaaggccag gagggaattt agcatccatt tggattcttc 360

catctcagca aagcatgggg aggatgcgtc ttcccttgct ggttttgaca tc 412

<210> 3129
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316046g06b1

<400> 3129

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cggtgcccg 69

<210> 3130
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316046g12b1

<400> 3130

gatttgagag gtatcccggt tacccgcgcc ggcatgcgac catgtttcac tgg 53

<210> 3131
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316047a09b1

<400> 3131

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acatgtacga gcgctcagca tgtccgtcct ccgtgacatc ttgaacagtg ggccactagg 120

ttccactaag atcattcaag gcgagcaacg gaacggcatc caaagcccga actaccaatg 180

cgcagcagca aacacggtga actggcaagc ggatgtggag agatgtatag actgggaagc 240

ccgcagccgg cgcgccaccg ggatgaccct cgccttcctc accgctgcgg ctaacgagct 300

cggctgcccc cttccttgct gacaaggcca tatttggagc tgacaatcag cgacacttga 360

cagttggcgc gagcagttgc tgcatggtca gcgagcagga t 401

<210> 3132
<211> 531
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047b08b1

<400> 3132

gccgtcctag tctccatctt tgccgccgtt gccgccatcg gcaatgaaga ttgcacccca 60

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tgtcgcatcg aaacgcccgg gtcgccgtac ctcgccaagc agcagtgctg tggggagctt 180

gcaaacattc cgcagcagtg ccgatgccag gcgctgcgct acttcatggg gccgaagtct 240

cgtccggatc agagcggcct catggaactc cccggatgcc ctagggaggt gcagatggac 300

ttcgtgagga tactcgtcac gccggggtac tgcaacttga cgaccgttca caacactccg 360

tactgcctcg ctatggagga gtctcagtgg agctagagac aattctctcg ctcatgaata 420

aataagcatg ttgcgaccat acatgtgtga catgcatata tgcatatagg acgaggctcg 480

cgcgctcatc atgtgtggtg ctatgtgcta catatatgga taagaataaa g 531

<210> 3133
<211> 64
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047b11b1

<400> 3133

tcgttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat 60

aata 64

<210> 3134
<211> 342
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047c11b1

<400> 3134

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cctcatcctg aggaacagac tgaaatatgc tctcacctac cgtgaagtgc agtctatcct 180

tatgcagcgt catatcatgg ttgatggaaa ggtccgcact gacaagacct accctgctgg 240

tttcatggac atcatttcca ttcccaagac tggtgagaac tacaggcttt tgtatgacac 300

caagggccgc ttccgccttc actctgtcag ggatgaggat gc 342

<210> 3135
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047d08b1

<400> 3135

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cgcaacgact ggaaaaac 78

<210> 3136
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047e02b1

<400> 3136

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atgatctatg gcacgctggc ggcactcatc ttcagtggct acattgtcta tgacacgggc 180

agcatcatca agcgttacaa gtatgacgag tatgtctggg ctgccgtcac gctctacctt 240

gacatcatca atctgctcct gggcctgctg actctgttta gggcgtgtga caactaggca 300

cgtctccctg cccctgctct ctcgtgcctc aaatcccgtc gacgaatttg gtatcctgat 360

gagtctttga catgaacaat tgtatagtct ggtctgtccc gctggcacgg cgaaaatgtt 420

gcttacttta aatgagttga tccctagtag agagaaaacg ttagaaaacc gtgcgcccgt 480

tttat 485

<210> 3137
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047e07b1

<400> 3137

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caagggcgcc gacttcccca cctacgtcgt tagtgacaac gagggcgact accaccatga 180

cgtcgtgtac atcaacagga acgttgtttg caccaccaac tggtttgagc catacaccaa 240

ggttctggac gagg 254

<210> 3138
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047f02b1

<400> 3138

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tttcaaggat tacttcaaga ggatgttcaa ctttaagaag gacaaggatg gttactggaa 120

gtggtttggt ggcaaccttg cttctggtgg tgccgctggt gcttactcgc tgttctttgt 180

gtactccctt gactatgcta ggacaaggct ggccaatgac gcaaaggcat ccaagggtgg 240

aggtgaaagg caattcaatg gcctggttga tgtctaccgc aagactctca agtcagatgg 300

tattgctggg ctttaccgtg gattcaacat ctactgtgtt ggaatcattg tctaccgcgg 360

tctgtacttt ggactctatg attctctgaa gccagttctc ctc 403

<210> 3139
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316047g02b1

<400> 3139

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ttggttaaac ggattacttc aagaggatgt tcaactttaa gaaggacaag gatggttact 120

ggacgtgggt tggtggcaac cttgcttatg gcggtgccgt tggtgattcc tcgctgctct 180

ttgtgtactg ccttgactat gctaggacaa gggtggccaa tgacgcaata ggcatccaag 240

ggtggaggtg aaaggcatta taacggtcaa cttgatgttt accgcacgac tc 292

<210> 3140
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316047g05b1

<400> 3140

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cgcggccgag tgcgactagg atttgaactc gaacacggcc ggcatggtgg tggaccgtgc 120

ttctgcctat aacagagact gaacgtcgcg gacctgaccg gatccctgca tggtatcagg 180

aaatggaaga cctctacaag cttaagctta ttggggactt aagcgattgc gagtcatgtg 240

atgatgctca ggaaaggaga caactcatac tctgggggtt cgatcagtac tattggagtt 300

gattataaaa tacggatccg t 321

<210> 3141
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316047h01b1

<400> 3141

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cctgtacaat tctagtccgg ccaaccggag taaacatggc ccaattgggc cctcggttat 120

tggtggagga gtatcatgac caacgatgaa ctgattgtcc aactctgttc cgttgggtgg 180

acatctgatc cgggatgtta gtccagacgg ggacgaaagg agaactggtg ctctcggtgg 240

ctaaagccta aagaggggct tggagacact aggtcttaag ctagggctc 289

<210> 3142
<211> 267
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316047h09b1

<400> 3142

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cccatgcggt aaaggcgcac gatcgatcac ctatgggagc gccacatgtg caacaagtgg 120

ggttctgtgc tggggtccgc ctggagggac gagcggaggt aatacctgtc attgtgcacc 180

gctgccgtcg gtggcgcatc aacttgccgg tctgtgtggc tgcggcaagc accagaggag 240

gcttgccgcg ctgtgctgca tatgtcc 267

<210> 3143
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316048b01b1

<400> 3143

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ttttttcgtg ctgatggtgg ttacagcaaa agaagagtgc gtttggagta gcagctcgtg 180

ttagcatgtc gtgcgtgtcc ttgctctccc acctaggctg aagcgagaat tggatcgtgt 240

gtgcgcctct gtattcggca agaagattac atgcatgtaa tttgacgaag aaacatatga 300

tggaaagact ttggtctgct ac 322

<210> 3144
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316048b02b1

<400> 3144

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atcaacccag cggtgacctt tgggctgttc ttggccagga agctgtccct gaccagggcc 180

gtcttctaca taattatgca atgcctgggg gccatctgtg gagctggagt ggtgaagggc 240

ttccagcagg gtctgtacat gggcaacggt ggcggcgcca atgtagtcgc cagtggctac 300

accaagggcg atggccttgg tgctgagatc atcggcacct tcgtcctggt ctacaccgtc 360

ttctcggcta ccgatgccaa gaggaatgcc agagactccc atgttcctat cctggccccc 420

ctgccgatcg ggttcgcggt gttcctggtc cacctggcca ccatccccat cactggcacc 480

g 481

<210> 3145
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316048c05b1

<400> 3145

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ttaaaaaaaa cacaccagtt ggtgagttgg aaaatactcc ctccgttcct aaatatttgt 120

ctttctaggt atttcaacaa gtgactacat acggagcaaa atgaatgaat ctacattcta 180

aaatatgtct atatacatcc gtatgtgata gttcattgaa atatctagaa agacaaatat 240

ttaggaacgg aggaagtact acagatagag aagctgcaaa cacgcggagc tgcaaacacg 300

cgggaagttc atgttatgcc gctgcttcat attctccttg gaggtggatg gagcgtgcag 360

atatcatttt cttcttggtg ggtggtttcg atcactctcc accatctgtg cattaatcca 420

atacaattac agggactagt tcttccggct cccttccacc gcatgcgtgg gcatggctac 480

gccatacct 489

<210> 3146
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316048c10b1

<400> 3146

ttttaatctg catttctcca gaacaatggc attaattcaa cggtacctcc tgtgatgggt 60

gatgctaatg ttgatcttgc cgacttggag ccatacatga agttactgat ggacgatgga 120

tcagatgagt caattgacag cattctaagc tgagatgtac tgtaggacgt tatcgtcaac 180

atgggcctat ggacctttga tgacatgccc ttgtctgatg gattatactg agggaatcga 240

ggtcgctggg tgcctgtata tatagacaaa ggaataagta ttctggacat caacaagtgc 300

ttgtgtctgg tgcctataga atagagcatt agcgacctca gtctatggtt atgtctagct 360

ataatggtca ggagacctaa gtcttatgca atagacctct gtcttgtgcc ctcagactat 420

attatatcta tatatgaaac cagggtgtga tgg 453

<210> 3147
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316048d08b1

<400> 3147

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caagaaaagc tggtgttgca cttatgattg gtggtatggt cgagactagg attgccatgg 120

gctttgctgg ccatctcgcc gctgggcttg gttgtttcag ttttattgac ctgcacacac 180

ctcttttatt gtctgaagat ccagtttatg gtggctatga agcttctgga cctgtctaca 240

agtttaagaa tgctcgaggc catggtggtt ttcttcattt ggacaacaat aatggatgga 300

aatgaagatg gttaacgcac gccttatact ccgggtttat agagcatatc agcgcattca 360

gtatagagtg tagaagttat cacacccgac gactatcgtg tgggactcaa atgtaacaca 420

atcaattgta agcataatgg taaagctcac gtgtatgtac tggctgaact gtaagccctg 480

tgaggcctat gatatttg 498

<210> 3148
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316048d11b1

<400> 3148

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gtcgaccttc cgccgctggt ggcgccgccg ccgagggtga aggcgccgac cccgcgcccc 180

cctgcgacgg actggctcca gcccgactcc ccgggcgtat tattcaccaa cgccgccgta 240

gccgtcccac tgggctccga ccaccgccgt atcgccatcg ccgtcgatct gtcagaccag 300

tccgcctaca ccgtaagctg ggccgaagcc aactacctcc ggcccgggga cgccggcatc 360

ctactgcacg ttcgctccac caatgttctc tacggcgccg attggggctc cgtcacccca 420

acattccccg aggacgacgc tgaggtcgcc gcgcgcacga tggaggagga ct 472

<210> 3149
<211> 81
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316048e10b1

<400> 3149

ggcctgagcc ttgctgggag tgtcggcacg cacanggcag cgaaggtcat tacacgtctc 60

tctgctctcg ttagccacga a 81

<210> 3150
<211> 560
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316048f04b1

<400> 3150

cccacgcgtc cggaacccgc accacatggc tgggatgttt tcaaccagaa aaccttgtat 60

gatgcataca agaagaggac caaaaacata gaagtcgaca tggatgcata caatagagcg 120

aaagaaaccg atcctgaatt ctaccgtgag gcttcaagtc ttcaatatgg gaaggtgtct 180

agggtggcgg aaccaaacat cgaccgaatg gttaatgagc tcaaggagcg ggacgagaag 240

cgcaaggcgt tcagcaggag gcgcaagttc aacgaagaca aggacgttga ctcgatcaac 300

gaccggaacg agcacttcaa caagaagatc gagagggcct ttggcaaata cacgctcgag 360

atcaagaaca acttggaaag agggacggcc ttgccagatt aaggttctgg cgtttggggt 420

cgcccactca actctgcggt actgtttccc acctggtttc tttgcttgta acctgtgttc 480

agaatatant ttctgaagtg taagaaagtg aaacctgcat gtaatgtaat gatgatgctg 540

tgactgatac atgtacaaca 560

<210> 3151
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316048f08b1

<400> 3151

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gatgccgggg cggtggcggt cgcaaagtct ctgcaagagg gccacccaga tttgaaggag 120

cttgacgtga gcaccaatct gtttcagagg tctggagccc gctgttttgc ccaggcggtc 180

gccaacaagc caggctttgt gctgctgaac atgaacgcga actacatacc cgaggaaggg 240

attgacgagg tgaggaagat cctgaaggca ggcgagaact tggcggacgt gcttggcccg 300

ctggacgaga acgagcccga ggggaacccg gatgacgagg atgaagaaga ggactatgat 360

gatgaggcaa agtatgggga cgataacggg aaggatgctg gcctcggctc gaagctgcaa 420

gacctgaagg tggaggcgga ggaagactaa acccccccc cctgcttt 468

<210> 3152
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049a08b1

<400> 3152

tcgcccacgc gtgcggggac gcgtgggcga gcatgaatgc gaccaggagc ggataataaa 60

tttgggccag gagcggcaga tcgatccagt aatggaggcg gcaaggggg atcctgacga 120

cccattggtc gtcttccgcc cagagcgggt cggaggatgg tgggcgcgta accaggactt 180

catacggaga cgcgcggaga cgctgaggcg acccgacggc cacgcggagg ccgatgccgc 240

tgccgagcgt agcagagagc cggcagcctg caagaactac atggagggac tgcatcttgc 300

cggcggtgga cgaggtgcgg aatgtggagt gcgcggtgtg actggaggac ctggtggtcg 360

gaggcaggaa gc 372

<210> 3153
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049b05b1

<400> 3153

tttcacaggc ccccgttgca gcagcagagc agatcgatcc agtacgtctc gggtgaacca 60

gctgagcaga tcgatggcgc tcactcgtcg catggccgca tccgccctcc tgctgctgct 120

cctcctcgtc gccacagaga tggggacgac gaggaccaag acggcggagg cgcgggactg 180

cctgtcgcag agccacaagt tcaagggcgc ctgcctcagc agcagcaact gcgccggcgt 240

ctgccgcacc gagaacttcc ccgacggcga gtgccacacg cacaacttcg cccgcaagtg 300

cttctgcaag agggcctgct agccggcctg ctcgccccgg ccgccctgcc ggccagcgcc 360

gagacgtccg atctgttcgt cagtgctgtc tgtagatctg ttcttagtgc gttcggttcg 420

cggcagagct gtcgtgtgac gactgtgccc gataagagga aacaccggct ctgagttgtt 480

cgctctgcta gagcggttgt gtgttggtgt gactggagag ataggcgtgt tagat 535

<210> 3154
<211> 506
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316049b06b1

<400> 3154

ttgattgcac tatcactgcg gcatgagatc aaccggggct tctttacctt gagagagatt 60

ggtcatggtc gtgatctgaa gaaattcctc attgtgactg gagggctctg gcttctttct 120

gttcttggga gctgctgcaa ctttttgaca ttgtcatata tagtctttgt ggtgctgtac 180

actgtgccag ttctgtatga gaagtacgat gacaaggttg atgcttttgg tgagaaggcc 240

atgatcgaat tgaagaagta ttatgccatc tttgaagaga aggtcctgtc gaagatcccg 300

aagaacaaga agcactagat cacaagagtt accctgccgc gtattgccat ctgtgttacc 360

ctcaacttgt cgcctcattt tgaaggatgg ctctgtgtca ttgcgtctgt ctttaggtaa 420

tactactttg atagtacata tagatgttgg tgtgcctgat ctttttgtgg ggttttccgc 480

tgaagatggn tgatcctcat tttttt 506

<210> 3155
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049c02b1

<400> 3155

tcggctgatc attgccctcc aaccaggacc ctgacagttg gtcatgatgg tttcttggag 60

gatgtctggt gcccatgtgt gaccgtgggg aggcgtgtca gatcccgtgg ggatggcgtc 120

gacgttatga agatctagtt gtactcagag gagtgcatca acactgaata cactgtggcc 180

acctcttctg tagttaccga acaattggac cgaaagacta tgcttacgag gaccatggga 240

ctgctaccgc ttggagatgc atgccttgaa tgggtgca 278

<210> 3156
<211> 140
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049c10b1

<400> 3156

ctggcgcgca tgctggtacc cttaccgaat cctgcccgtg cgccccacgc atttgccgac 60

cacctgtgag ccgggcggcg cgcacaacgt gaggtgagcc cgatacagtg aggccctgcg 120

gtgaccctgc ctgaccctaa 140

<210> 3157
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049d09b1

<400> 3157

tcgcgcctgg gtgcttgaca agctgaaggc cgagcgtgag aggggtatca ccattgatat 60

tgccctgtgg aagttcgaga ccaccaagta ctactgcacc gtcattgatg cccctggtca 120

ccgtgacttc atcaagaaca tgattactgg tacctcccag gctgactgtg ctgtgctcat 180

cattgactcc accactggtg gttttgaggc tggtatctcc aaggatggcc agacccgtga 240

gcacgccctc cttgctttca cccttggagt gaagcagatg atctgctgct gcaacaagat 300

ggacgccacc actcccaagt actcaaaggc ccgttatgag gaaattgtca aggaagtctc 360

ttcgtacctg aagaaggtcg gctacaaccc tgacaaggtt cccttcgttc ccatctctgg 420

gtttgagggt gacaacatga ttgagaggtc caccaacctt gactggtaca agggccctac 480

ccttcttgag gctcttgacc agatcaatga gcc 513

<210> 3158
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049d10b1

<400> 3158

tcgggaaagg gatctcgccg aaacgcacca tggagctcgc cgcaaccagc gctgctgccc 60

tccggtgatc gtgggggttg gcgcttacga gggtccctac ggacaggagg agtggtatgc 120

gccctagggt gtccttggtt gtctctggag gaatacatga tgaaagatgg actgattgcc 180

aggctccccc cagggactaa ccagctgccc cgaaggcggt ggatgacggg gacaaggatc 240

taaccaagct tcggggcatg ggccttgtcg gcggcgaccc atccaaggaa aagatcctct 300

tggaagtcac tgagctgctg ctacaggagg agtatcagat gaatgatgca tacgacctgc 360

tgtagaataa gcagaatgag gagaatgctg ggatgaaagc actg 404

<210> 3159
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049d12b1

<400> 3159

tcggccaaag gttatccaat ccgcacagaa atccccatct caaaacccta gccctcatcc 60

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gcgccggcgg ggcgcatcgt gatggagctg tacaaggacg cggtgccgtg gacggtggag 180

aacttccgcg cgctctgcac cggcgagaag ggcgttggca agagcggcaa gccgctgcac 240

tacaagggca gtgccttcca ccgagtgatc cccgacttta tgtgccaggg cggctacttt 300

accaggggca acggcaccgg aggcgagtcc atctacggcg agaagttcgt cgacgagaag 360

ttcgttcaca agcacaccaa gccccgggat cctctgcatg gacaacgcct ggcccaacac 420

caacgggttc cagtt 435

<210> 3160
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049e05b1

<400> 3160

ttggccgagc acttgaagaa acactggaga agttagaccg attaattgat gagatattac 60

agttgcaaga cttcctggat ggagtatgta ccaacatcat gcacatgcac atcacgaagc 120

tggagctgga cactgggaat ttggaccagt gtgtacagac ccgatctgag ctggaggaga 180

accagatgaa gcacaacagg tgggagcagg accagattgc gtgaatgaag gagaacatcg 240

ggcgctttgg gcacaggtac aacaagat 268

<210> 3161
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049e06b1

<400> 3161

tttgaaccgg acgctgagcg gagactttgg tatccacccc ttggggctgc tcgaccctga 60

gggtaccgag ggcttgatcg agcccagggg gttggcctgg ggctagagcg tcaacggtcg 120

tacggggagg attgcgtgag gagagatgaa ctgactggac gccttcggta ggggggtgaa 180

cagcgtgaac cgagacggca gatctgacgg ggacaaaaga ggaactggcc gctccgcgtg 240

gcacatacca aagaggagcc ggacgacaca cggtctaagc ttgggacatg gcgctga 297

<210> 3162
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049f09b1

<400> 3162

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cttcgccacc ctcgacgggc ttgaccatgc agccaagatc aagagcccca ccgaggccga 120

gaagtactac ggcgagacca agactgatct cggcgatgtc ctcgccaagc taggctagat 180

ggatcggaat aatggccgcg ttgcttccag gccttttatg ttagttcata tttggaagcc 240

agcaatgtaa cttccctgtt gataatatgt caacaagcac ttaagtatga ttctatcttg 300

agattcagtc atatgaagag tcaacattaa gacaaactgc gcacaaatcc gatgtaacaa 360

cgaatagtaa cttgcagtta gagctcaaca agcacgagtc 400

<210> 3163
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316049h02b1

<400> 3163

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atagctaata tgaaggagta cattgcccga tgtgcacatg gatctgcgaa gcttgctcgt 120

ggggctcaga gcaaagagaa gactcttgca aagatggagc gtggaggtct tgctgagaag 180

gctgttaatg acaggattct tgcttttcgc tttacagatg ttggcaaact accaccacca 240

gtgctgtagt tcgctgatgt gacatttggt tacactcccg ataatctaat ctgcaagaac 300

cttgacttcg gcgttgacct tgactcgaga gtcgcactgg tcgctcccaa tggcgcaggt 360

aagagcacac ttttgaagct catgacaggt gacctatcta cgttggatgg gatggtcaga 420

cgccacaacc acctaaccat tggacaattc catcaacatt tcactg 466

<210> 3164
<211> 354
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316050b04b1

<400> 3164

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atccaagaca caagcaacca gtgtttaggt aaaaatgaga ttgcaaggtc atgctgcaat 120

catagccagt gtttcgcaca cctgcttaga taatattgca ggtgtgccgt gtcggtattg 180

agttgatgct tgacagtaaa ggctgtttgt tggtgcattc acttgtacag attggacaaa 240

agcgaagtct tgtaataagt aaatcatttg tacatgctta cataatagtg acgtttttct 300

ggattgttag tcgaaacaaa ccccttaaa cagctggttg tatagcgaag aggc 354

<210> 3165
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316050c04b1

<400> 3165

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ttcaagcacc agatcgagtc ggacacctac gctgtgtacg gagacagctt aagagctgtg 120

aaccgcattg ctc 133

<210> 3166
<211> 259
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316050e04b1

<400> 3166

tcgaaaaaca aaaaaaagag aaaaccatga aaaaaacaaa acacaataaa actcaaagat 60

gaccctgaag agattcttgt gcgtacaact ggcgtcaaca tggcccattc aaggccaatg 120

gggcgccctt tttgggggac ccaagtttcc atcccctggc tgcccccctt tgctcttttt 180

tttagcgtcc cctcattgca gttccccggc cggggttctc caacgacctg acggggaaac 240

cccgcgcgtt ccccaattt 259

<210> 3167
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316050g03b1

<400> 3167

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gcgacgagtc cgtcgtcaag atcgtcgaca ccttcccagg acaatccatc gacttttcg 180

gtgctctgcg tgctcgggtg tacgacgacg aggtgcgcaa gtgggtgacc tctaccggta 240

tcgagaacat tggcaagaag cttgtgaact cgcgggacgg accagtgacc tttgagcagc 300

caaagatgac agtcgagaag ctgctagagt acgggcacat gctcgtccag gagcaggaca 360

atgtcaagcg tgtgcagctt gctgacacct acatgagcca ggcagctctg ggtgatgcta 420

accaggatgc gatgaagact ggttccttct acggttagaa cattctccat acacacccac 480

catctcttgc tgcataagaa gaggttaagg g 511

<210> 3168
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316050h05b1

<400> 3168

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gccagacatg gacgcgctcc tcccggaggg gttcacggag aggacacgag acaggggat 180

ggtgctgaag atgtgggcgc cgcaggtgga ggtgctgcgg cacgccgcca cccgcgcgtt 240

tgtgacgcac tgcgggtgga actccgtcct ggaagcggcg tcggccgggg tgccgatgct 300

gtgctggccg cagtacgcgg agcagaggct gaacaaggtg ttcgtggtgg acgagctgaa 360

ggtcggagtg gtgatggaag ggtacgacga gcagcttgtg aaggccgggg aggtggaaac 420

gaacgtgagg ctggtgatgg ggtcagaaga aggggaaaag ctgatggata ggctggcatt 480

ggccaaggag aacgcttgcc aaaacgc 507

<210> 3169
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051b06b1

<400> 3169

ggatgcggac gcacagggcg acggcattaa cggctttgac cgctctgcaa aaactgttag 60

aactgtgtga ccaccgcgca tgcgttgccc gtgatcacac atgattacac gctgcagctg 120

ttgtgcgtcc gtgtgaccct gatgagcgca caaccggaca actgatggac ttatggcccc 180

acggggccat tgtggctgtg tgcaggacta cataacaact gatgagaccg actgccctcc 240

ttcggtgaac agctgaacaa ctgtaccgtg ctgacagcca cacaggaaca acagaagatc 300

tggggctccg agctgcaaaa ctaacagagg aactcgagga cacaaggcgt aactttgcga 360

ctgtccacaa cgttacaact gggagaccgg taaaacc 397

<210> 3170
<211> 222
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051b08b1

<400> 3170

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atgtcctcgg tgtaatggcc gcatctcgct gctgtttgcc ctggatttgt ttgttgtttg 180

gatgtactag gatggaatgg aaatcgcagc attttacccc tg 222

<210> 3171
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051e06b1

<400> 3171

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gagaggtgcc atgaggatct cagccttgtc tgaagctgga gttatctatg tcatgaccca 180

tgactctatt ggtctgggag aagatggtcc gacccatcaa cccattgagc acttggtgag 240

cttccgtgcg atgccaaaca tgctgatgtt ccgtcctgct gatggcaagg agactgccgg 300

ggcatacaag gtggctgtcc tcaacaggaa gaggccatct attctggctc tctccaggca 360

aaagcttcct catctgcctg gtacctcaat tgagggcgct gcgaagggtg gatacactat 420

ctctgacaac tcgaccgaca acaagcctga cttcatcata atgagcactg gttctgaggt 480

agaga 485

<210> 3172
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051e11b1

<400> 3172

ttgctcgacg ccaagatcat caacgaccgc gagacgggca ggtcccgtgg cttcggcttc 60

gtcacgttcg gcagcgagga gtctatgcgc caggccatcg aggagatgaa cggccaggag 120

ctcgacgggc gcaacatcac cgtcaacgag gcccagtccc gccggtccgg ctgtgggggc 180

ggcggcggcg gctacagagg ccagcgcggc ggtagcggag gctacggcgg cggcggcggt 240

ggctactgcg gccagggcgg tggcggctac ggccagggag gcggtggcgg ctacggccag 300

ggcggtggtg gctacggcgg ccagcgcggt ggcggcggct acggcggtca gcgtggtggc 360

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taccatcttg ttgtctatcg cagcaagtta tcttcagtt 459

<210> 3173
<211> 233
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051f08b1

<400> 3173

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atgaccatga tgagttcgtg tgggggcagc tggagtaatt atgggctttc ggggccattg 120

ttgctatgtg gaggatttca tgtagagaga tgaactgaat gtccgtgtcc gctcgctggg 180

agaacaactg aagcgagatg cctgtctgac cgggactaaa gaagaactgg cgc 233

<210> 3174
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051g06b1

<400> 3174

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atggatttca gctcaacatg ggacatccgt gcaaccccga cgttcttctt cctcaaaaac 180

ggccagcaga tcgacaagct cgtcggcgcc aacaaacctg agctcgagaa gaaagtacaa 240

gctcttggtg atggcagttg aaccatgcta cagaattaga acagagccag cttgtcattg 300

cttatatatc tgtattgcca tgcttgtgtg tcttatgtgt tgcatgatag tttcctggtg 360

tacagtttcc gtgtcttttc cgtctagaca atgttttaca attttgcgac acgcatatgc 420

atatgctgtg aaactgtaag atgaccctgc tggtaaaatg ctagttttgt gagagtgtca 480

tctgc 485

<210> 3175
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051h09b1

<400> 3175

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tgacggatct taccagttgc ggtgaaggtg ctgaacatct tctgcagagc aatggagagg 120

tccttgtagg tgttgtacat cttgagatcc accttgcgca gtggaatctg ccaagaaatg 180

gaaagtgtat gcaacatcat tttcttgccc tctctgacat gtaccggctg ccgcacaaag 240

caggcatcaa gtgcgcatat gtttatggtt cggaaaggcg ttaataattc gcgtcggcgc 300

tatggaggcg acaaacaaca cacagcggat ggtgtcgcct tgcgcgcttt ctgccatggg 360

atctcctttg tggatatttt gccctactta aagcgtttgc ccatttgcat gtcatgtttt 420

attcaacatc ctgtaagtat ataacgaatg caaactcgag aaaactagtt tataatgggg 480

a 481

<210> 3176
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316051h10b1

<400> 3176

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ggattggtcc tatcaggcag gactgggagc cgatagtggt gcggaagaag gcgcataacg 120

ccgtcgacaa gaaggacgaa aaggccgtca acgctgcccg ccgctccggc gccgatatcg 180

acaccaccaa gaagtacaac gctggaacga acaaggctgc atctagcgga acttccctca 240

acaccaagcg gatcgacgac gacaccgaga acctttccca tgagcgtgtt tcaagtgacc 300

tcaagaaaaa ccttatgcaa gcaaggctgg ataagaagat gacccaggca caacttgctc 360

agatgatcaa tgagaagcca caggtgatcc aggagtacga gtcgggcaaa gcgattccga 420

acaatcagat aattggaaag cttgagaggg cacttggagc taagctgcgt agcaagaagt 480

aat 483

<210> 3177
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316052a02b1

<400> 3177

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acaggccgat cctgctctag cggacatact aaagctgtcc ttctcaagct ccgaggtccc 120

catggcactc cgttatgttg ccatgtcaga cgacaaagca ctagagaact cattgctatc 180

tggatttact gagaatcgcg aggacggttc tggaggaaat catatcactt acacagacac 240

ttgtactgca agcagcgaaa gtgtgaagaa acatctgagc ctggattccg ttcaagactt 300

ggtgacgtca cggatgggaa acaaccaacc aactgaggtg atcgtattct gcagcggtgg 360

ctttaaggac aatg 374

<210> 3178
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316052a04b1

<400> 3178

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tggtgtgatc gagtctgtgc tggccaaggt tgatatcctc ctacttggtg gaggattgac 120

cttcacattc tacaaggccc agggattaac tgcaggacag actattgagg aggaagacaa 180

actcgatctg gtaactacac tgtgtgaccc ggaagaagcc atggcgggac aactgatgat 240

accgactgtt gttgttgcag atgtcaagga tgcactagat gacacaagga ctattgttgc 300

tgccactggt atccctgcaa ggtggat 327

<210> 3179
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316052a08b1

<400> 3179

cccttgcggc tcggcgccgc ccctcgtgag tgaggtaaga cgcccgcaag agggagcggc 60

ccagcaaggc ggggtcgtgc ccgtgctgtg tccatctgct gacgagtgca tcgattatgg 120

gactcgtggg gcgttgccga tgcctgcttg aatccaaccc gaatgattat ctgatcatgg 180

atctgcgttc ggtagaggta caacagagcc gacctgccaa gataccgggg accaaggccc 240

aaactatcat ccgtgtacta gagatatctg gggagcttat gtgacggatt ggctcagcta 300

cgcactgagc gagaggcttg aacacgacaa atgattgagg cctggtgcca ccgacctgaa 360

tgagcttgct tcagactcct cctacgacac ttgaggtact acc 403

<210> 3180
<211> 52
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316052c09b1

<400> 3180

taaaaaaatt aaaaaaaaag aaagaaaaaa aaaaaagaaa acaacctaaa ag 52

<210> 3181
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316052d05b1

<400> 3181

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atagcattgc gaaagattat acagcttctc tcgactcatt tatctcccag ttgcccctgc 120

agcaacacgt tgatttgaag ttccttctct ttcgtttgga cttcactgaa tactacagcc 180

gtgtttcgtc caacaaatga aatgagtgtg tgcttctaat gcggaagaaa taggtgttag 240

atacactttt tggttggggc tcatgaaaaa actgatgaag caacactcta aaatccagga 300

tgtacatgaa cagttgaaaa ggaagttatg atctcaaagc taagcctaat gatgaaagtg 360

tatcagttat gtcatctgac gcacagattg ttgattggca aggaaatgat tatctttcta 420

atttctaaat atatactccc tctgtcagga aatacttgca tttttatcca tttctcccga 480

tagtattttc ggatggagta ttctgctagt actactc 517

<210> 3182
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316052e11b1

<400> 3182

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ttgagttttg ggcgaaccgg cgcgggagcg caccatgaaa aagaaagaac cggcgacgct 120

gaaggcggac cctgaagagg acgagtccgt acaactggag caggcaaggc cccgggggggc 180

catagacaaa ctgcggagga ggacgagacc aaagaggaag agaaagcgcg cgaccgcccg 240

cgggggggagc aagagaaacg ggacgggaac ctgaggggga cgaaagaaaa acaggagctg 300

cgcgtggcca gagcgtgaaa agagg 325

<210> 3183
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316052e12b1

<400> 3183

caggcctgag ccctgcaggg atgccgacgc acagggcgaa agcatcaacg cctgtgcccc 60

gaacccgatt aactgtttga ccaccgccga tccggagcgt gagatgacta agatacaacc 120

agtaccgctg atgcttgtgc ctgaccatga tgagttcgtg cacctgcaac tggcatggtc 180

ctggccctcc agtgccattg tgtgtatgag gacgagacca agaataaaga tgaagtgatt 240

gcccgcctgc tgtgggaaca agaacaactg aaccgtaatc tgaccctgac gaaaacaaaa 300

caagaactgc ctctcgcaga ggtaaaagag gaagatgatc tcgctgacac taagcctgaa 360

cctggccctg gtctacaact tacaacattg tgaaaggcaa aaccctgcca atacacaact 420

taagcggctc ataccacatt ccccatttgg cag 453

<210> 3184
<211> 518
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316052g01b1

<400> 3184

acggcccccc atcctcatcc tgctccctaa ccaagaagcg agacgacggt gaccagtccc 60

cagagcgcac tcccacccca tggatctgca gaccttcgtg ctgagggtga ccatccactg 120

ccatggctgc aagaagaagg tccggaaggt gctcaagagc gtcgaaggcg tgcaggacgt 180

gaaggtggat gcccagctgc acaaggtgat ggtgaccggc accgtggacg ccgagacgct 240

catcaagcgg ctgcacaagt cgggcaagca ggccctgcca tggcaacaca cgcctgccaa 300

gaatcccgac cctgcgccga cagccccagc cgacgccccc gcgccggccg aggacggcag 360

caaggatgct gctgtagcgg agaagaagcc ggcggagcct gtgaaggagc cgcaggccga 420

cagctcggac atgaagccgg agcaggagac ggccccggag aagaagcctg aggcggagaa 480

tgatgcacaa tctgagaaga ggctgacagg aggaggag 518

<210> 3185
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053a04b1

<400> 3185

ttgcagtaac acacacacag agaagccaat ctcgccggag agggaagcgt cgacgatgtc 60

gggccgtggc aagggaggga aggggctcgg caagggcggc gccaagcgcc accggaaggt 120

gctccgggac aacatccagg gcatcaccaa gccggcgatc cgccgtctgg ctcgcagggg 180

cggcgtgaag cgcatctcgg ggctcatcta cgaggagacc cggggcgtgc tcaagatctt 240

cctcgagaac gtcatccgcg acgccgtcac ctacaccgag cacgcccgcc gcaagaccgt 300

caccgccatg gacgtcgtct acgccctcaa gcgccaggga cgcaccctct acggattcgg 360

cggctaggcc acgccggtcc agcagaaccc accttgcgcc ccagattcac tagctagcca 420

tg 422

<210> 3186
<211> 463
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316053a06b1

<400> 3186

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aggtgatctc atccctgacc acctccctga ggttcgacgg tgccctgaac gtggatgtga 120

ctgagttcca gaccaacctg gtcccatacc cgaggatcca cttcatgctc tcgtcctatg 180

cgccggtcat ctcggccgag aaggcgtacc acgagcagct gtcggtgtct gagatcacca 240

acagcgcgtt cgagccgtcg tccatgatgg ccaagtgcga cccgcgccac ggcaagtaca 300

tggcgtgctg cctcatgtac cggggcgacg tggtgcccaa ggacgtgaac gcggcggtgg 360

ccaccatcaa gaccaagcgc accatccagt tcgtggactg gtgccccacg gngttcaagt 420

gcggcatcaa ctaccagccg cccaccgtgg tgcctggcgg cga 463

<210> 3187
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053b02b1

<400> 3187

tttacaagga ttcccctagt aacggcgagc gaaccgggag cagaccagcg gagaaggagg 60

gaaagcggaa gcagaagcaa ccgagcgaac ggcggcgacg acccgaagag ggagaagaag 120

atggtgatgc ccacggaccc gatgctatgg cacaaggtgg ccgccgtctc cggggtcgct 180

gctcttggac tgggcaccta tggagcgcac atgttccgcc cccagaaccc tagatacaaa 240

gagatttggc agaccgcgtc cctgtaccat ctcgtccaca ccgcggcgct gctcggggct 300

cccatgacca agcgccccaa catcttcgga ggccttctga caactggaat tgtgctcttc 360

tctggaacgt gctacactgt ggcttacctt gaagacagga agttctcttc accagcaccg 420

atcggtggct ttgcattcat tgctgcttgg gccagcctgc tcttctgatt gtattgtgtt 480

ttatcgggtg aaaactatgt ctaccttaca c 511

<210> 3188
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053c07b1

<400> 3188

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aggcaatcac aaacattatc aatgactgcc gtgagaagaa ccgcaagttc gttgaaacca 120

ttgagctgca gattggtctg aagaactatg acccgcaaaa ggacaagcgt ttcagtggtt 180

ctgttaagct tcctcacatc cctcgcccaa agatgagggt ttgcatgctt ggtgatgccc 240

agcatgttga agaggcaggg aaaatgggcc tagactgcat ggatgtggaa tctcttaaga 300

agatgaacaa aaacacgaag ctagtcatga agcttgcaaa gaagtatcat gctttacttg 360

catctgaggc tatcattaag cagattcccc gtcttcttgg acctggtctt aacaaggcag 420

gaaagtttcc aactttggtg tctcaccagg aatcctttga gtccaaggct aatgagacca 480

atgccacagt caagttccag ttgaaaaagg tgctttgcat g 521

<210> 3189
<211> 486
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316053c09b1

<400> 3189

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gccatggccg gcaagtgcta cccgacggtc agagacgagt acctggcggc ggtcgccaag 120

gccaagcgca agctccgagg cttcatcgcc cagaagaact gcgcgcccct catgctccgc 180

ctcgcgtggc actcggccgg gaccttcgac gtgggcacca agaccggcgg ccccttcggc 240

accatgaaat gccccgggga gctcgcgcac ggcgccaacg cccggctaca catcgccgta 300

aggctgctcg agcccatcaa ggagcagttc ctcattctct cctacgccga cttttaccag 360

ctcgctggag tcgtcgacgt cgaggtgact cgggggcctg aggtaccctt tccccgggga 420

gacaggacaa gaccgaggct tctgcagaag gncgacttcc tgatgctacc caagggtctg 480

accacc 486

<210> 3190
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053d05b1

<400> 3190

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agaaagactt ggagcaacaa gagaattatg acccgaagtt agctgatgag gagagggaga 120

aaggtcatga gatgttcaag cagcagaatt atccagaagc aataaagcat tacaatgagg 180

ctatcaggag gaacccaacg gatgctaggg tgtacagtaa tagggctgca tgctacacca 240

agtcgggagc catgcctgaa ggtcttaaag actcatagaa gcgtattgag ctatacccaa 300

ccttcaccaa agggtataca agaaaaggtg cagttcagtt tttaatgcag gaatattgaa 360

agggtaatgg aaacttacca tgctgggttg aagcatgacc ccaat 405

<210> 3191
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053d10b1

<400> 3191

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gtggaagatc taagcagagt atgagtgaga agaagagcag gaaggccatg ctgaatcttg 120

gcatgaagac tatcactggc gtgagccgag taactgacaa gaagagcacg aatatcctgt 180

ttgtcatctc caagccagat gtattcaaga gccctgcctc tgacacctat ctaattttcg 240

gtgaggctaa cattgaggat ctgagctcac agctgcagtc ccaggctgcc cagcaattca 300

aagctgcctc gatcttagca gcgtcatctc aaaccctgag gcttctacag ctgttcagga 360

ggatgactag gattgtgatg agactggagt tgagcctaag gacattgaac tggcgatgac 420

ccacgccggt gtgcctaggc ccaaggctgt gaaggcgctc aaatctgctg acggtgacat 480

<210> 3192
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053f07b1

<400> 3192

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gctcgtgact gactgtggcc agaagtactt caagcgactg taccaaaggt tggccatggc 180

caacgttgat actgtcccca acaactactg aaggaacaag aacagaatgc ccgccttcgc 240

taactgcagg agcaagttaa ccaaagatgg gacgctagct gtttctaaag aggaacggga 300

gctaagctag taagacgtta gctacacatt tgtcactatg atgacatagc ttggcactta 360

tcgctgtgaa caaggttacc acagttacag cccgggcggt acatatgtac atggatttgc 420

atcacgtaca aattttatca gttaatgtga tagttgagag agcgct 466

<210> 3193
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316053g04b1

<400> 3193

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ccaacaagag atacaacgct gctaagatct ttagcaaccc tgatgttgcc aaggaggagc 120

catggtacgg tatcgagcag gagtacaccc tcctacagaa ggacatcaac tggcctctcg 180

gctggcctgt tggtggattc cctggtcctc agggtcctta ctactgtagt attggtgctg 240

acaagtcgtt tgggcgtgac atagttgact cccactacaa ggcctgcctc tttgccggcg 300

tcaacatcag tggcatcaac ggcgaggtca tgcccggaca gtgggagttc caagttggcc 360

cgactgtcgg catctctgct ggtgaccaag tgtgggttgc tcgctacctt cttgagagga 420

tcactgagat cgccggagtt gtcgtcacat ttgaccccaa gcccatccca ggcgactgga 480

acggtgctgg tgctcacaca aactacagta ccgagtcgat gag 523

<210> 3194
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054a03b1

<400> 3194

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ggaggagggc agaacgaatg atgaacggag agccggtcgc ccgtctctgg ttgaacaacg 180

aacaagtgat gcgagactga cggctgccaa agacgaacta gcaattggcg ctgcataggt 240

gaaagatgag ctaggagaca cggaggccta aggtcgtaac tggcgctggt cacaacgtta 300

cagactggga gaatgctgaa actacgcaac taaatagctt aagagcacag ccgcatatcg 360

ccagttggcc agatagcgaa gaagccaaga gggatcgacc tgatcaacat ttgcaac 417

<210> 3195
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054b12b1

<400> 3195

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aataccggtg atgctggtgc ctgtccgtga cgagctcgtg gacgtacaac aggccgtgat 180

atgctctttc agggccattg tgtctgtgtg gaggaggcca tgacaaagga tgatctgatt 240

gccctgctcc gctcgctgat agaacaactg aacctacacg tcaggcatgc tgggaccaac 300

tgagaactgg cgctgcgtgt ggtatagctg aaagaggagc gtgatgacac ctggccttag 360

cttgg 365

<210> 3196
<211> 146
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054e06b1

<400> 3196

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gaccggtacc tcgcaaacac tgggtgcacc accgggagat ccacgcagcg tgagattcac 120

gcatgatttc aatgagtgac tcgctg 146

<210> 3197
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054e10b1

<400> 3197

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tgcctcttgg catgatccag ctgagatcgg cagagatgga gatccggcgg caggaggctc 120

tggcgacggc cctggtgtcg gtgctggccc aagaggctgg agctaatgtg ggcaccgctg 180

cgatgagtta cacaggcggg ggacgccagg aacgggcatg tcgggacagt gcacaacagg 240

actaatgctc gggtcgggcg ctgcctgcca gagactgtta caaccccggt tacaacatca 300

acgtcacgta ctggagggag ctgcacgaca cgacggaggg ggtcaaggac cgctaccac 359

<210> 3198
<211> 109
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054g07b1

<400> 3198

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gcctaagctc gttactggct gttgtgcggc aacgtgccta cttggaaaa 109

<210> 3199
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316054g12b1

<400> 3199

gtctcgactg ccgccgccgc ccgagatggc gatccgccgt gggccctcct gcgccgccct 60

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gttcgaagat ggttgggaaa gccggtgggt caagtctgag tggaagaagg atgagaacat 180

ggctggtgaa tggaaccaca catctggaaa atggcatgga gatgctgagg acaaaggtat 240

ccaaacctca gaggactaca ggttctacgc catctcggcg gagtaccctg agttcagcaa 300

caaggacaag acactcgtcc tgcagttcac ggtgaagcat gagcagaagc ttgactgcgg 360

tggtggttat gtcaagttgc ttggaggtga tgttgaccag aagaaattcg gtggcgacac 420

accatacagc attat 435

<210> 3200

<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316054h02b1

<400> 3200

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ctccgttacc tgtattaact gtggtgactc accggcgatg ccggtgtcat gagtgtcatc 120

atgatgtcac ctgcagcacg cgctgagtgc tgctcggttg acacgctgag ga 172

<210> 3201
<211> 494
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316054h12b1

<400> 3201

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gccagagtgt gcgtcggcga ccctgtgcgg gccgatcaag aagcacatca tcgagcactt 120

ccatcacaag aagcccgtgc cgcccaagcc ggagcccaag ccccagcccc acccggacta 180

cggccccgtg cccaagcccg agcccaagcc gcagccccac ccggactacc accccgtccc 240

tcccacgccc acctacggcg gcggcagcgg cggcggtgga taccatggac accactgact 300

ccgatctgcc accgtccggc ctagcagtga aatttcatgg cttgttgctg tcagtgagtg 360

agcgacgttg ctatttatgt cacgggttag cttgatcttc tatcattcag aataacagtt 420

gtgagggata agtatgtgtg tcaggcaaat gtacgggtaa tgggtcagtt nttttttaca 480

aggtttggaa tatc 494

<210> 3202
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316056b11b1

<400> 3202

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gaaccgatcg tgctcgattc gctgtagttg caacgc 96

<210> 3203
<211> 294
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316056c08b1

<400> 3203

ggcctgagcc ctgagggact cccagcgcgc aggccgaaag cgtctacgcc cgttgcccga 60

aacacagatt tgagttttgg ccaccgcgga gcctgagcgc gcgatgacca agattgaacc 120

agtaccgctg atggtgtggc ctgaccatga tgaggtcgtg caccacaact ggcatggcat 180

ggcccttcca gggcatcgct gctgtggaga ggaggacatg agaagagatg aacggattgc 240

ccggctccgt tcgctgacag aacaaccgaa ccgtgatgcc aacctgaccg agac 294

<210> 3204
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316056c12b1

<400> 3204

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aagagggtgg agagcagcac gaccctgctg ctgcttctgt tcctccccag gtgggcttac 120

aaactcagca ggagaacacg aggtttggtc gcataatgag gggtggattt ggagacatgt 180

tgcgaggcaa agcaaagggc ggtgatgaac ccagctgata ttatcaacgt tgtcaatcaa 240

tacaatattt tccaagcttg atttcggtcg tcacagcatg aataagttaa tgtagaacaa 300

catgtttgct cattgtttgt acttcgtagt gagatggtat ccatgaggat gctgcgcttt 360

ccctagctaa gcgatccaaa actaacgagg tgtaatctca gacc 404

<210> 3205
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316056d07b1

<400> 3205

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tgaccaggat aagtcgtagc cgtgcactga ggatggcact gccctccctg gcattgatgc 120

tttggggagg agaccaaaag aaaagatgaa cggactgccc ctctccgcgg gctgggagaa 180

caaccgagcc gtgatgttag cctgaccgag acgaaagaag aacctgcgcg gcgcgcggca 240

gatctagaag agggactcga tgacaccaag gctaagctcg gcactggcct gtgaactaca 300

acg 303

<210> 3206
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316056d08b1

<400> 3206

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gcaggacgcg cgcgccaagc tcgctcgcga ggcgcgcgcc aaggatgctt cgctgctcgc 120

cttcgcgaag aagctgcgcg aggcccacca cgtgctcgac cgcctcgtcg acgactacgc 180

cgactaccgc cgcgatccca agcgcccgcg cggcgccgac gctgttgacg agcccgagcc 240

ggtgtcgcag ggcgacttca gcgcatccct gcactccaag ctcaagctgg atgacatctt 300

gacctatgca catcgcataa gctacacgac ctttgcaccg ccggagcatg gtgctgggct 360

gcctctgagg ggtgcattgc cgcctgcgcc acaggataac gagctgcggg atgtcacag 419

<210> 3207
<211> 474
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316056e12b1

<400> 3207

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aaccctaacc agttccgatc cgcacggtag ggcctgcgat gatggcggct tccctccgcg 120

cggcggcgac gaggatgctg cgcccggcgg agcttacagg ggaggggcgt tggctgctcg 180

tacacaccca gcaggtttcc aaatccaccc gcgcctacaa ggaaggaaac catgccttgg 240

atgaataccg agcgggggtt atccagcaca ggaaggagca gctgtactgt ctcattgccg 300

gcgccgaggc caatggccgc accttgttgc tgaacaaaag tctgctcaag gatctctcta 360

cacaagtcac gcctagacca gangacccta agtggcgcaa gatatgtata accaacagag 420

gtgaccgact gtactaggac ggcgggtgat gttgtatttt ctgggctcac ttat 474

<210> 3208
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316056g01b1

<400> 3208

tactataggg aaagctgata cccgctgcac aacgcgaaac cgtatacgcc tgtcgcgcgt 60

gaaccactgt ttgagttctc gccaccgcgg agccagagtt cgccatgatt aagtgtgaac 120

caataccgct gctgccggac cctgacgagt tagtgtacgg gcccctgccg tacacatggt 180

cattggggga cattgtcact gtgtggagga gaaccagact aaagaagaac tgaatgtcca 240

cagccggtct ctgtgcgaac aagcgcacac cgatctcaat ttcgaacatg acgagcaga 299

<210> 3209
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316056g07b1

<400> 3209

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acgtcgtcca gtccaagaag ccccaaggtg ctggcggtgg cggcgagggg acatcgtcgg 120

cggcggcgcc ggggattagg ccggccaagg gggagtcgct gtcgctggtg gcgcggctgc 180

tccgggggtt caagaacctg tcccaccaga tcttcgcggt gtacgacgag gaggacgagg 240

aggaggagga gccggagaat ggtgatcggg ctccccacgg acgtcaagca cgtcgcgcac 300

attcggttgg gacggcagca ccagcaccac ctccagcgtc cgctcctgga accgtgccgc 360

ccctcctcct ggcacca 377

<210> 3210
<211> 531
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316056h06b1

<400> 3210

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gccgtccctc tcccgccggg gctcctcctt cgccgtcgtc tgcagcggtg gcaagaagat 120

caaggtcgat aagcccctcg gactcggagg cggcttgaca gtcgacatcg acgccaacgg 180

caggaaggtc ggcaagaagg gcgtgtacca gtttgttgac aagtacggtg ccaacgtcga 240

cggctacagc ccaatctaca cgccagagga atggtctgag tctggtgacc gctacgccgg 300

cggaacgacc gggcttatta tctggagccg tcaccctcgc cggcctactc ggcggtagcg 360

gtctnctcgt ctacaacacc agcgctctcg ccggctaaga gagatntaac gtgtaacaca 420

gggccncggt ctctgctagc atgcacgtct ctgtatcctg cgtagctacc ttnctgtgaa 480

tgtatgcaat caacgatgca tagtnatgga tctaacagat tgtttatgtg t 531

<210> 3211
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316056h11b1

<400> 3211

tcttctcttt ttcgcgacct ctggcaccag tttatttggc aagagcagtc atgctagaga 60

agaaagaggg gggagagcag cacgaccctg ctgctgctta tgttcctccg caaccgggct 120

tactaactta gcaggacatc accatgtttg ctcatatcat gaggggtgga tttggagaca 180

tgttgcgagt taccaacaca ggcgcagact aaccgaactg atattatcaa cgttgagcgt 240

cacatcaatc tctgcgaatg tggagtttgc gcgccacagg atgactaagc ttaggagcga 300

cctagggccc gctccttgag cgttcttacc tgcgtgactc gacacatgag gatgc 355

<210> 3212
<211> 255
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316058b03b1

<400> 3212

tctggaattc attgatgatc tgacatacca agttaagaac aacattatcc ccatgagcag 60

aattgacgat gctgtctaca ggattgttcg ggtgaagttc accatgggtc tatatgagag 120

cccctatgct gacccatgcc tgggtggtga actcgggaag caggaacacc gcgatcttgc 180

tcgtgaggcc gtcaggaagg cattggtgct gctgaaaaat ggaaaatctg cctccagccc 240

attgttgcct ctccc 255

<210> 3213
<211> 130
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316058d03b1

<400> 3213

aatgttatag cttttgtata gcgtaaccta atttacagtc cgtggacgaa caccaacagc 60

attgtgactg ccaaaaccct gccgatacca atcgtaatgg tactaagcca cattcccctt 120

tctccagttg 130

<210> 3214
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316058g05b1

<400> 3214

ttacccgcct agaccacaac agggcactcg gtcagatttc tgagagactt ggtgtccaag 60

tttctgacgt gaagaatgct attatctggg gtaatcactc gtccagtcag taccctgatg 120

ttaaccacgc cactgtgaag acttccagtg gagagaagcc tgttcgtgaa cttgttcaag 180

atgatgaatg gctaaacggg gagttcattg ccactgtcca gcagcgtggt gctgcaatca 240

tcaaagcgag gaagctctcc agtgctctct ctgctgccag ctcagcttgt gatcacatcc 300

gtgactgggt tctgggaacc gccgagggaa catttgtttc catgggtgtg tactctgatg 360

gttcatacgg tgtgcctgct ggtcttatct actccttccc agtaacgtgc agtggtggtg 420

aatggacaat tgttcaaggg ctcccgatcg atgagttctc taggaagaag atggatgcca 480

ccgcccagga gctgtcggag ga 502

<210> 3215
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316058h02b1

<400> 3215

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tggaagatta tatgtcttat gtatgagctg ctaaatcgac ttcactggct gtgtgttcac 120

aaggaccgga ttgtcaaacc cacggggaca accaactaaa tggcagtttg gaaagaccca 180

cttttaaaca ggtgcttgat tacacaaggg ctccgcttgg atgtgccttc caatcaacaa 240

cgaagtgtat gtgacaaatg tgacgctccc taaattaatc tttttgcagc acaacttgct 300

tttggttact cgcagtg 317

<210> 3216
<211> 576
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059b07b1

<400> 3216

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ggcctgcaaa gtcggcccag ttcgtgttgg atttgctgaa gaatgctgag agtaacgctg 180

aggttaaagg cttggacgtc gacaacctgt acatttcaca catacaggtg aaccaagccc 240

aaaagcagag gcgccgtaca taccaggctc atggacgcat caatccttac atgtgcaacc 300

cctgccacat tgagctgatc ttgtcagaga aggaagagcc tgtgaagaag gaggctgaca 360

acgtcgccgc accaaggaaa gctatctaag ctaacggagt ggctgcattc gtccaagaat 420

cttagttgta ggtcttctca agtatcttta gtggcagcgt ttgctgcctc cttgatgttc 480

ttgttaccaa catggagtaa ggatttgtta aggctgatgc tatccctgcg atcgcgagtg 540

gtctttatat gctaagacag tttcagatat ttgagc 576

<210> 3217
<211> 474
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316059c07b1

<400> 3217

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gttgcgtcga tgcgggaggc cttctccctc ttcgacactg acggcgacgg ccgcatcgcc 180

ccctcggagc tcggcgtcct catgcgctcc ctgggtggga acccgacgca ggcgcagctc 240

cgctgacatc accgcccagg agaagctcac ggcgcccttc gacttcaagc gattgctcga 300

actcatgcgc gcccacctcc gcccggagcc gttcgaccgc ccgctccgag acgccttccg 360

cgtactcgac aaggacgcgt cgggcaccgt ctccgtcgag gacctccgcc acgttctcac 420

ctccataggn gagaagctcg agccccatga gttcgacgag tggatccgct aggt 474

<210> 3218
<211> 508
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316059c11b1

<400> 3218

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ggccacgtcg tcaccaagcg cgagctgccg ccgcgcccgt ccgaccgcaa ggggaaaggt 120

accaagaggg tgcatttcgt caggaacttg atcagggagg tcgctgggtt tgctccgtat 180

gagaagcgta tcactgagct tctcaaggtt ggcaaggaca agcgtgccct gaaggcggcg 240

aagcgaaagt tgggtaccca caagagggcc aagaacaaga gagaggagat gtccagtgtc 300

ctcaggaaga tgagatctgc tggaactgga acagacaaga agaaatagag catcccaggc 360

tcattaagtt gatggcaatc ttctgttctg gtgtccagtc tttactgcat gtcgaaccta 420

ctagacctga aactgttatc cgctagctaa acattatgct atgttgaacc ttctgtctgg 480

ngagatttct gatctaactt gcactgca 508

<210> 3219
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059d05b1

<400> 3219

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gctgaagtag gctctccgtc ttgcggggcg agtagtcccc cgaaagtgag gattgaaggc 120

tttgcctgcg ggaacaaaga gaaccattgt gcagtcacct ttgcctgaga gcatttttgc 180

cataccacca attcaccatt gaccattagc gccattttgc acccgcaccc cacccccccg 240

aacatgtaaa ttttccgccc ccgagataca gctagtccct ctaatgctaa gctaagctag 300

tagtacctat tcgagtcaga gattatctag ttgagctgag ttgagtcctc attgacgccc 360

gtctggttga cgctcttgaa actgcgcaat cacagagagc attgggttat gtacataggc 420

gaggtctccc gtgcgttgtg ttctgtatct acatattgag taatgtgtgt gtgt 474

<210> 3220
<211> 494
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059e06b1

<400> 3220

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gaaatgcata cggaggctaa ggagatgccc aggcaacaca aggaacacgt ccagattgca 180

tcctttcatg tgtggagcaa cacagactct tgcccaattt gtggatgtga ctagactacc 240

actgagtcta agaaccgatg tgaatcaagc agagctggtg gaacagagag ctctgatgga 300

gactatgctg agtcaagcaa cagtgataca tgaaagagct caccatgatg gaagcagtat 360

gctcgatgaa agcacaatac atgatacaga tgtgacgtat gcgaagaacg ccatcttcgg 420

agatggatcc taatgatgct catctgatga aaatgaagca tgccctattg agagcttaag 480

ccatcatcat cctg 494

<210> 3221
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316059e11b1

<400> 3221

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gtacacggtc gacatggact ggtccgatat caccaacacg aactgcgttc tcaagggctt 120

caccaatggt ctctgcatta aggcgcacga cgacaccaaa actgacctcg tatgcatcca 180

atatccacta caagaacata actatggact aactctgcta cccaatcatc atcaaccaga 240

attactgtcc gaacaaacta tgcacctgta aggtcgaccc ccaccgggtc accgctatgg 300

acgttacctt acaaaacatc agctggacct acgacacccc tgaggacatc aatctgctct 360

gctccgaaaa gaatccctgc aaatgcatta caatgtacga cgtcaagatc gagtactctt 420

gccagtacaa tcagactatg actgtctata gcca 454

<210> 3222
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316059e12b1

<400> 3222

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acaactacag gtaactcggt cgagatggct cgcactgcag caacaaagct cgtgctggac 120

ggcctggtgg cggcagtgct cctggcagcc tacgacgcgg cgatctcctg cggtcaggtg 180

aactatgacc tgacctgctg cgtctcctac gcaaaaggca gagaagacag cccgcctggg 240

gcctgctgtt ccggagatag gagattggac gccttagcgc ggagcaccgc cgacaagcaa 300

gcgacatgca cgtgcatgaa gagtgctggc ggtgggctca acccaggaaa ggctgcaaga 360

atcccctcca agtgcggggt gagcatgccc tactgcatca gcgcatccgt ggactgctct 420

aagatccact gatcg 435

<210> 3223
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059f09b1

<400> 3223

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acgctgtccg tctccgcctc gtccatcgcc gggggggacc acctgcagct cggcctctct 180

ctccggcggc gctggccgcg gggagtgcag gggcaccgtg cccgagagca actgggagga 240

cgcgtagggg gagctcaggt cgacgtcggc cgaggcgcac cgacgcgtgc tgcaggggcg 300

cggctacatc agctacggct cgctgagcag gggcaccgtc cactgcaacc gccgtggagc 360

cagctactac aactgccgcc ccggcgccca ggacaacgcc tacca 405

<210> 3224
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059h05b1

<400> 3224

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gctgttggtg tgtccctgac gtgatcaggt ccggacaact cagctgatca tggccttgcc 120

gtgccatggc atttctgctg tgtagtggat tacaaaagat gagctgatct gcctgctccg 180

ctctcttggc taacagaaca actcgaatgt gatcctgtcg tgaacgagag aaaagctgaa 240

ctgtcgctgc gcgttgctga aatagaagag ttgctacacg acacctgagc ttggctctgg 300

cctggccttt acaacataac gactggaata gccaagccct tacccaactt aactgtattg 360

ctttgcagcc ccctttcg 378

<210> 3225
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316059h07b1

<400> 3225

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cacgccttcg cgctgttcgt ggcggtgtcc gcgggcgcca acatctccgg cgggcacgtg 120

aacccggccg tgaccttggg cgccttcgtg ggcggcaaca tgaccctctt ccgcggcctg 180

ctctactggg tcgcccagct cctgggctcc accgccgcct gcttactcct gcgcttctcc 240

accggcgggc tccccaccgg caccttcggg ctgaccggca tcggcgcgtg ggaggcggtg 300

gtgctggaga tcgtgatgac cttcgggctg gtgtacacgg tgtacgccac ggccgtggac 360

cccaagaagg gcagtctggg caccatcgcg cccatcggca tcggcttcat cgtgggcgcc 420

aacattctgg tcggcggcgc cttctccggc gcgtgcatga accccgtcgt ctacttcggc 480

cccgccctcg tcagctgaga gtgggggtac cagtgggtgt actgggtcgg ccccc 535

<210> 3226
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060a07b1

<400> 3226

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tgttggtcct cgtatgcaaa tgttacctcc tggtgttcca gttggtcagc aaatgttcta 120

tggccagcca ccagcgttta ttaacccaca gcctggattt ggcttccagc aacctttcat 180

gccgggaatg aggccaggtg gtgctccgat gccaaacttt atgatgccta tggttcagca 240

aggacaacaa ccacaacgcc cagctggtag gcgagctggt gctggtggaa tgcagcaatc 300

catgcagatg ggtcagcagc agatgctggg tagggaggtg agtcgtggtt accgctattc 360

agaccgggcg tggcatgcct gatcctgcga tgcatggtgt tggtcgtgtt aatgacatcc 420

ccatatgaga tgggagggat 440

<210> 3227
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060a08b1

<400> 3227

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cgattgttcc tgctaaagac aagcaaacaa tcataaaaac agctataagt aagtttcgtt 120

ctgccatcca gttgcagttt gacttccacc gggctattta caaccttgga actgtcctgt 180

atggcttggc agaggatacc tcgaggtctg gaggggccga tacctctcct aatgatctgt 240

atagtcagtc tgctatttac gttgcagctg ctcatgcatt gaagccaaat tattcggttt 300

atcgcagtgc tctacggttg gtccgctcaa tgctaccgtt gccatatttg aaagtgggat 360

atttgactgc tccttcggca gacgacccca ttgcaccaca caaacattgg gagaggtcac 420

agttcatctt acaccacatg gaactccagc aggtcaatga ttccgaaagc gcacctgtca 480

agcaaacgcg ctcgtggaga a 501

<210> 3228
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060a09b1

<400> 3228

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tcagggcacc gcaccgacaa tatcaatcca caacacagct gggtgtcagt tatactcgaa 120

caaagagtca ctgggcgctt ccattacttc ggataaatgc agtgaaatga atgtattggt 180

tcctagcgac aagactgatg gcgactggct ggagcatcct tagccgaaca ggacatccat 240

tttttccagg acagacagga gcaccacata cacaaggtct catttcggcg cataaataaa 300

ttcgaagata tc 312

<210> 3229
<211> 457

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316060c07b1

<400> 3229

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taggaagaaa ctgctacaac ctttgccgcg cccgtggtgc tcagaagtta tgcgcaaacg 180

tttgcaggtg taaactcaca agtggcctaa gctgccctaa ggacttccct aaattggtcc 240

ttgagtccaa ctcagatgaa ccagacacca tggagtactg caacttggga tgtaggtctt 300

ccctatgtga ctacatggtc aacgcagctg ctgacgatga agagatgaaa ctctatgtgg 360

aacagtgtgg tgatgcttgt gtcaatttct gtaacgctga tgctggcctc acatcccttg 420

atgcgtaatg atgcgtatcc atggtctgag atttcac 457

<210> 3230
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316060d04b1

<400> 3230

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agggcaagag gagcctccct tcctggatgg gctccggcga cggcggcggc ggcgggggaa 180

gtccgggcaa gaagaagcac gcggaggcgg cccgcgagaa ggccccaaca agggccgatt 240

tcttccaact tttggatggg gtggtctttt gtgcttgcag ggttcgtgaa ccctgagagg 300

ggcaggctgc gctcccaggc gctggatatg gaggccggtg taccggcccg attggtcgtc 360

ggattgcacg cttcttgttt gcgcgtttgc caacaccccc aagtttcggc aggtgcagtc 420

ggag 424

<210> 3231
<211> 532
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060e07b1

<400> 3231

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cagaagatta tgagggtggc actttcaccg tctctaatct gggaggtcct ttcggaatca 120

agcaattctg cgccatcgta aaccctcccc aatcggcaat cttggctatc ggctctgctg 180

agaagagggt agtccccggg gcggctgagg gccagtacga aatcgggtcc ttcatgtcag 240

ccacgctaag ctgcgaccac cgggtcatcg acggtgccat gggtgcggaa tggctcaagg 300

cgttcaaggg ctacctcgag gacccgacga ccatgctgct gtaggagtac tctttctttg 360

ctgtaaatga tgatgatgag agcagttttt ctgtgtaggc tctcacaaat aaagaccaca 420

ataaccacgc ctcatttttt ggcaatgagg gctggaaacc cagagcacac atacggatca 480

tagaccgcac aagatgttta acctatttat cggcaaatgg ccgatacacc tt 532

<210> 3232
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060f12b1

<400> 3232

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tcgtgatcga ttcactcttt gagggagttg atttctattc caccatcacc agtgccaggt 180

ttgtggagct caacatggac ctcctcagga agtgcatgga gccagcggag acgagcctga 240

agcatgccac tacggacaag agcactatcc atgatgctcg gctacgcgag ggctacacca 300

ggatccccac agttcatcac actgctgcag gacttcttca acgtgaagga actctgcaag 360

agcat 365

<210> 3233
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316060h11b1

<400> 3233

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ggtgccactt tgcttgacgg agtggttgtt gaaaagcaca gcatggttgg cgctggatct 180

cttgtcaagc agaatacaag gattccttct ggggaggtct gggttggtaa tcctgccaag 240

ttcctaagga agctgacaga ggaggtgatc acattcatcg cccaatcggg agccaactac 300

atcaacttag ctcatgttca cgccactgag aattccaaga gcttcgatga gattgagctc 360

gagaagaagc tgaggaagaa gtttgctcac aaagatgagg agtacgactc gatgctcgga 420

gtggtccgtg agatcc 436

<210> 3234
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061b01b1

<400> 3234

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accgttggct gccgttccat gtggtgcagg tcgactacgg cgtcgacgtt gtgctgtgat 180

gggcggagcc agcgagagtt gctgcgtccg acgtttggca aagatgcatc cgtcgggggg 240

tggtgctgaa acgatggggg atgaggaagg gtgtgcagcg acgaccaatt ggagctgctg 300

agagaggcgg cgagcggtgg agatccgact agcggcggag atccggcggg tcaagtagct 360

ctatcatggc gctcgcgtga tttgcagagt agaagacggc gtggacatgg tcacatat 418

<210> 3235
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061b05b1

<400> 3235

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ttaaattgtc cgtggcgctg tttgtttgcc catcatggtt ttactatgtc cgctctgtac 120

tctgtacccg ccactccgac agacttgata cattgtagta ttgacttgtc ttggcatatt 180

ttgtcagtgt gtcttctg 198

<210> 3236
<211> 538
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061b09b1

<400> 3236

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cgtccggtgg caagctcttc accctggagg aggtcgccaa gcacagctcc aaggacgact 120

gctggctcgt catcggcggc aaggtgtaca atgtgaccaa gtttcttgat gaccaccctg 180

gaggcgacga cgtcttgctg tcttcaactg ccaaggacgc gaccgacgac tttgaggacg 240

tgggacacag cacaaccgcc cgggcgatga tggacgagta ctacgtcggc gagatcgacg 300

cgaccacgat acccaccaag gtcaagtaca cgccgtccaa gcagccgcac tacaaccagg 360

acaagacccc cgagttcgtc atcaagatcc tccagttctt ggtccccctc gcgatactgg 420

gcctggccgt cgccgtacgg atctacacca aggcagactc tgtctagcac cgtcatctta 480

taccagtcag tcagtcattc ggaagtgtcc aagagcttga ataagtttta gtggggat 538

<210> 3237
<211> 94
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061b12b1

<400> 3237

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa cagg 94

<210> 3238
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061c03b1

<400> 3238

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tatcttcctg ggggttctga ttcatctgta ttaactaaag aagcttgtga tattattttc 120

attagcacag tgcaaatcaa accgaaaaaa tgcacatgct tgccctttgt aaagaaccac 180

tattactata tatgctctac tttgtacaga atcatatgta tattatgctt gcccctaaat 240

tgttgcttta tgctgaacca ctattactat attatgattt gatatgagat tcggtgcttg 300

aatcaagtat ttatggagac catgccctta tgcaagtctt caggccttgc tgggttgttt 360

tattgttctg aaggcatcat catgtgtgat tgtagataca ttgcctcctt cacacttaca 420

tccaccatca atcagttaga cactcccttt tttgcaaata aaatcaagtg aatggtgtac 480

tcccaa 486

<210> 3239
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061d04b1

<400> 3239

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gtggtgctgt ctgaccgtgc caagcttccg tccgctcgcc tgggaagatc ttggtcctta 120

tgggcaccct aattgaggag gagcctgaga aaacagactg acggcaaatc c 171

<210> 3240
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061d11b1

<400> 3240

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aagcttgtcc gttgtgcgga gaggggaggc ggataggtac atacacatgg aagggttgca 120

gagatcgtcc tccactttca gaaggtccgg ctcgtcgggc ctggtgtggg acgagcggtt 180

cctgaccgag ggcgccgagg cgaaggccgc cggcgagggc ggcacggatg aagcccatcc 240

ggagatgcgg cgctcccgga gcaccggcgg cgtcgggatg atgctgcgcc gtggcggcga 300

cgacaagaag cagcagcagc agaaaaagga gcagcaaggc cagaagaaga aggacgagga 360

gcgcgatccc caggtgttcc ggaccaagga ggtggccccg gacgtggacc cgccgtc 417

<210> 3241
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061e08b1

<400> 3241

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cctccatcaa acgacaatct gtcgagatag cctcgtccgc gggaggcctt gtcaatgcta 120

agcccgctac aacaagaagc ccaccataac ctccagggag atccagacct ccgtacgcca 180

tgtactccct ggggaggtcg ccaagcacga cgtgtccgag ggcaccaagg ccgtcaccaa 240

gagtacctac tattagaacg cgttgcctga atctagcagc aaaagtagct ccctgcagac 300

ggcttaaagg tcgtctgagg actctggaaa tactggaaga aaatacagcc ctactgaagg 360

aagaaaaatg ctgaatcatt gcaaatggac tggcggctcg aaggccaccc gcacagaagt 420

gaggcacgcc cgctggtcta ttggccaacg aagattccag aaac 464

<210> 3242
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061f01b1

<400> 3242

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cgctgctgct gttgtgtgtg cttgccctga tgaggtccgg tccacacaac tgacgatagc 180

atggccctgc catggcattg ctgctgtggg gaggaggaca tgagaaaaga tgaacggcct 240

gccccgctcc gttcgctggc agaacaaccg aaccgtgatg ctagcctgac cgagacaaaa 300

gatgaactgg cgctccgcgt ggctgagcta ggagaggagc tagacgacac cagggctaag 360

ctctggactg ggcgttacat cacaacgact ggactgagaa taccctgacg ctacccaact 420

t 421

<210> 3243
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061f02b1

<400> 3243

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ttcatgcact tgtttacata atcgccggaa ccgatttgct cataaaggta ttcagatcca 180

ctttgaagcg tctaagacgg gagatcgagg ttggggcctg caaagatgag atccaattcc 240

agcaggcaca tttatctgag aatatgcagg tgtcattgcc gacaagaatg cttttgatgc 300

agaagacgac tatatgtctg agacccctcc ttcggagcag aacttaatat ggatctatg 359

<210> 3244
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061f05b1

<400> 3244

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gtggctgacc ctgccgagtt cgtgcccgta caactgagtg tgatcactgc cccgtcaccg 180

ccattgttcg tctgatgtgg agcccatgaa ctacgatgat ctcattgccc tcctacggtc 240

ggtgccagaa caactggacc gtgacgtcag tcggacaaga accatacaag aactggcgct 300

gcttgtgcca tagctgaaaa aggagctcga caacaccaag cctaagcctg tccctggaca 360

tacatctaca acactgtgac caacaaaacg ctgacgatcc ccaactt 407

<210> 3245
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061f12b1

<400> 3245

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cctgcgcgcc gtacctcacg cgggccgacg acctattaaa cccgtagctg gagcggatgc 180

tgacggagct caacggacag gtctgtcacg acgacgtgtt cataggcggc aacaccaaca 240

gggtcagctt agacttcatg tgcaacccgc agcagtacgg g 281

<210> 3246
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061g03b1

<400> 3246

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cgccgaactc acagtggccg tgcgcgccgg gcaagaagta cttcggtcgc gtgcccatcc 180

agatctcata caactacaac tacgggccgg ctgggcgggc cataggtacc gacctgctca 240

acaacccgga cctagtggcg acggatgcga ccgtgtcatt taagacggcg ctgtggttct 300

ggatgacgcc gaattcacct aaaccttcga gccacgacgt gattacggtc cggtggagcc 360

cctctggcgc cgaccaggcg gaggggaggg tgcctgggta cggtgtgatc actaacatca 420

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tctacaagcg ctactgggac ctactcggcg tcagcta 517

<210> 3247
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316061g05b1

<400> 3247

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caaagccgcg gtggaggcgc acaaggcgaa gaaggccttg gacgcgatgc ccaagacgcc 180

tgagagctcc cccaaggtgt ctgatgactg aaagagaccg ccctggttgc gtgtttcgat 240

gatgtgtatg cgggtttgga ggggggagag gggctggctg aagttgtcct cgttcattcg 300

gagtctaaag tgcaccattt tctgtattct gtatccccat gtcgtgatgc cttaagatac 360

attttgcatg cacgcggtta cttggtttcc tgctgccgtt ttggaacggt gggtggt 417

<210> 3248
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316061g11b1

<400> 3248

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tgctatacga tcaagatgag aacagcggtg cttataaaca ttactcagaa ttttgccagg 180

gtccagtcat ggatcctttc gagcacgacc ccgagaaaga agggcactac agggaggctc 240

ttagcatgga cattgaactt acagacgatg cacaggtgga ggcagaaatg aaagccgctc 300

tggacgacta ccaggtgata ggttcagatc tga 333

<210> 3249
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316062a01b1

<400> 3249

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gcccaccatc acctccaggg agatccagac ctccgtacgc ctcgtcctcc ctggggagct 180

cgccaagcac gccgtctccg agggcaccaa ggccgtcacc aagtttacct cctcttagat 240

cgcgtcgcct gtatctagta gcaaatgtag ttccttgctg ttggcttagt gcttgtctgt 300

ggactctggt tatctgcaag taatattagt cctactgttg gatgaaaatt gctgaatcat 360

tgcaaatggc ttgttggctc gttggccacc tgcaagaagt gagttatgtc cgctggtcta 420

ttggccaatg aagatttcgg aaacaatgtt gcgttgctgg ttctattt 468

<210> 3250
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062a04b1

<400> 3250

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gtggttgtgg gttgcccttg agaggtcctg gtcctaccac tgggggaaat aagggccttt 180

gggggcaatg gttttttgg ggggaagtca agaacaaagg ataaacggat ggcccgcttc 240

cgttggttgg tggaccaatg aacccgggag gtaagcttgc cgggaccaaa gaaaaaactg 300

ggcttcgggg gggcaaactt aaagaaggag ttggttaccc caaggcttaa gttgggaatt 360

ggccgcggtt taccaccgtc ggaatgggaa aaaccttggg gtacccaaat taaatggctt 420

ggaagacaat ccccttttgg ccagtt 446

<210> 3251
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062a07b1

<400> 3251

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gtcacgcaga tcatcagtct tggtatgatt gttacctcag cattgatcat tatggaaggg 180

attgatggtt gcgacaggga tcgaatcacc agctgtggtg gttctttttg gttgcatgga 240

gcctggattt aaaaggggtg atattctgtt tttgcacatg agcaatgaac ctattcgcac 300

tggtgaaata gttgtcttta atattgacg 329

<210> 3252
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316062a09b1

<400> 3252

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tcttcatcgc ccaggccccc gcaggtgtgc aatccgttgg cgtgtgctac tgcatcatcg 180

gaaacaacct cccgccgccg agcgacgtgg tccagttcta cagattgttg gggatcacca 240

acatgcgcgt ctactacgtc cagctccagg cgctcgacgc gctccgtggc tgcggcatca 300

gcctcagcct cgggaccacc aacaacgacg tggccgttct cgcagtagac tatacgccgc 360

cgtcgcctgg gtgcaggcca acgataaggc ctactaccgt gccgccgtgg acgtgcgcta 420

catcttcgat ggcaacgagc ttgtcagcga cacc 454

<210> 3253
<211> 524
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316062c01b1

<400> 3253

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cggtggcgat tgcgcacacg atcgggcacg tggcggcgac ggtgagcatg gcgaaggtgg 180

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gtggatgcgc tctcgcggac gtcaccgagc tcaatttcaa catgattgga ttcctggggg 360

cgatgatctc caacctggcg ttcgtgttcc ggaacatatt ctccaagaag gggatgaagg 420

gcacgtcggt gagcgggatg aactactatg cctgcctctc catgctgtcc ctggtgatgc 480

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<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062c08b1

<400> 3254

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ggggggggge ctttttgggt tcctcggttt ccttccggcg cgtggcgcgg ctttttttt 180

ttttcggggc tccctgtgta cacttgctgg gcggtggttt cctgcggtgg gggtggggta 240

ccccctgggg ccccccctct cttgtgcttg ggggcgcttc ccctttttcc tgtttggctt 300

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ctttccccgg tttccctctt ttttttatgg ggggg 515

<210> 3255
<211> 515
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062e03b1

<400> 3255

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agtttttcac ggagctggca ttgaacttca gtgacatcag gaggctgctt ttgtaaatga 120

aaggtgctgt gttatcgtgt ttcaaagaat tctttcaaga aggtggccca agaaaagaca 180

ctaggtgcaa atttagtttc agttgcttga tcaccagtgc ataagaagta accagttttg 240

taaattaata agagagttgg caactccacg gcgtttttttc ctccttaatt tgggaggtga 300

gccctgagaa gttacggcca tttcatgttt gatgtggtta cacaaacatc aactcttgag 360

gctgaggttt gttgccacgt ttcctgagga tttctggcaa cataagaagt ttttgcccat 420

gacttcgata catggcttga tgacagtaat aagtgatgat tctttctaca atattgatat 480

acatacttct gagcatctca gattgtttgt cagtt 515

<210> 3256
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062e10b1

<400> 3256

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aagctattat gttgccgtct gtccgtgggg tgcttgccaa ccgtgcgcaa tgcatggtcc 120

tatggagctc cttgtttctt tgttgctgag ttcatgaccc taggcgaact gattgaccgt 180

ctgccctggt taggtcgttg agtgaaccat tttactcggg ctgtcagcct caccgggttt 240

actgaggttc tgtttttttcc gaa 263

<210> 3257
<211> 549
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062f06b1

<400> 3257

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ctgacaccaa acgttttcat tggccttctt gttggcgcta tgctcccgta ctggttgtct 120

gcgatgacca tgaagagtgt tggaagcgcg gctctcaaga tggtggagga agtgcggagg 180

cagtccaaca cgatccctgg gctcatggag ggcaccgtcc agcctgacta tgcgacatgt 240

gtgaagatct ccaccgttgc gtccatcaag gagacgatcc ccccgggttc tcttgtcatg 300

ctgaccacct cttatcgtcg ggacctttt cggtgttgag accctctttg gcgtacttgc 360

cggtgcttct ggtttctggc gtttagattg ccatttcagc atcaaacact ggtggtgcct 420

gtgacactgc gaagaaatac attgaggctg gcgcatctta gcacgcaaga gcctgtgccc 480

aatggttata ttgcccaagg tgcttggttc gtgacccctt gggacccttt aggacacctg 540

gcccttgtt 549

<210> 3258
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316062g11b1

<400> 3258

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ctctgggggt tcctggtttg cgcccggggg ctggcctcgg ttgtcttttt tttgggtggc 180

gcctattttc atttgggggg cgggcgcttt cccgtttggg gggggggaac ctctggg 237

<210> 3259
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063a03b1

<400> 3259

taatttttaa aaaaaaaaaa aaaaaaataa aaaaaaaaaa atttaaaaaa ataaaa 56

<210> 3260
<211> 206
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063b02b1

<400> 3260

gccgagcgcg ttcgctcgat cgcggcatac ggcgcgcgga tcgtgcggat cgcggggaat 60

tacgacgaat cggtcgtgtg cgccgcacag ctcgcgcagg cgaacggctg gtacgtcgtg 120

tcggatacgt cgtacgacgg ctacgaagcg attccgcgcg acgtgatgca gggttatggc 180

gtgatcgccg ccgaggccgc tgcaca 206

<210> 3261
<211> 343

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063c04b1

<400> 3261

tctcaagttg gttttccggt ggaaaaaaaa tttgtaggtc agtcaaacgc gatctatctc 60

tatcgctccc gaacccacct ctttcccttc cgatctggtc gccgccgaat ccggcgtcgc 120

cccccacccc ccacccccgc gctcggttcc cgtccagatt ctgccaccta cgacggagcg 180

aggccgccga agccggcgac aaaaggattc gaagcagtcg gccggagcta ctttgacttc 240

gacgttgagg agggcgtcgg cctcagcttc tggcctccca gggcccgccg ccgctgggct 300

cgaccatgtc aggtgctggc gactcggaga ggagctttgg ccg 343

<210> 3262
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063e12b1

<400> 3262

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ctgatcaagg agtcgtggat ttgggtatgc ccgcagctga aaatcctctc ggacgtggca 120

ggcttgtcat tggaaatcca aaagctcgag catgatgtgt taccccagct caagcttcag 180

gaggctaagc tggaaatggg cgccctggaa gccgtcctac tcatgaagaa ctcagctgtt 240

gcgctcttac atttgaggaa gtgctttaag gaagacttgg gcgtattgtt ttgcgaggat 300

catctggtct cagccaaagt caaaaggctg agcaaaatgc taaaggatat tgctgtccgg 360

ttgcttcagg agcgtgaatg caacattgtc gggcttagga gcgtgtccgg ttgctggtcc 420

agctggtcac cgaggtggtg gacacccccg ttcatttcga tgattctgat gagtcttctg 480

atgagtcttc tgatgagtag acttatcagc tagctcg 517

<210> 3263
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063f02b1

<400> 3263

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tccccgacca acagttctat ttccgcacct ccggcccgtg cgtgagcatg aataattcag 120

accgaccagg ttggctgctg gctgtcccga gtgagtgcgc gtacaaccga ctggagcatg 180

gatgtccctt gccagccatt gtctgtgtgg gggggaatgc ctgacgaaag acggactgac 240

cgcccgcctt cgctgggtga ataaacaacc caacctggat gcctgcctga cacgaacgaa 300

agactaactg tccctgcggg tgacataaaa gaggaacgag cttacagacg ggctgccttt 360

gcttgtgact ggccgttaac aaccaacgga ctgagaagaa acaagcctgg cgccacctaa 420

attaatttgc 430

<210> 3264
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316063f10b1

<400> 3264

gcaccttctc ccctcctgcc cccgagcacc gcagccgccg ccgccgccgc cgccgccgcc 60

gactgcagcc atgtcgctga tcgcgggtga ggagttccag cacatccttc gtgtgctcaa 120

caccaacgtc gacggtaagc agaagatcat gttcgcgctg acctccatca agggtgtggg 180

ccgccgcttc tccaacatcg tctgcaagaa ggccgacatc gacatgaaca agagggctgg 240

agagctttcc gcggaggaga tggaccgcct gatggcggtg gtgcacaacc cgcgccagtt 300

caaggtgccg gactggttcc tcaacaggaa gaaggattat aaggacggca ggttctccca 360

ggtcgtctcc aacgccgtgg acatgaagct cagggatgac cttgagaggc tcaagaagat 420

caggaaccat cgtggtcttc gtcactactg gggcgtgcgt gtccgtggtc agcacacaca 480

gacctaccgc aggagaggaa aga 503

<210> 3265
<211> 188
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsfl9316063f12b1

<400> 3265

tcttttctca gtcgtcttga gataagttta tcgtcgcgtc gtttagcgtt tagctgtgct 60

ccttccagat ccaagtcgtt gtctgtctgt gtaatgttta cctggtactg attcagtcat 120

ttggacatgg tgtttatgtt ggttcgctga ctctgtgatt ggactctgaa tgcaaaaacc 180

tttnttac 188

<210> 3266
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063g02b1

<400> 3266

ttaatgttac tcacggaact tcagagaatg gctcatttcc cagctatgca attcacacac 60

cagacttcaa gttcgatagc cccattgcga caaatatcac acaaggtttc atcccaaggg 120

gcgatatacc aagctcgccg aatcctcaac tggcagatca tgttgtggta ccagtttctg 180

gagatgtgaa tcagcttgct cctagacccc aacggaggga tgactgggat atactgaaag 240

ccatagtgta tggaggctta gtggagtcag tcaccagcct ctcagttgtt tcggcagcag 300

cgtcgagcgg cgccaaaaca ttggacatat tcatcctggg aatagccaac ctcatcggag 360

gacttcctct cattctccac aatatcgctg atctaagaga catccgagac gtggacggtg 420

acgacgagca ggtcggccac tactggctgc agctcgggag gcgggccaaa gcccggctcc 480

acat 484

<210> 3267
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063g12b1

<400> 3267

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gccatgagta agctccaaag tgacgctgtt aaggatgcca tcacccagat tgttggggag 120

gcgagagaaa agaagcgcaa gttcactgag actgtggagc ttcagatcgg tctcaaaaac 180

tacgacccac aaaaggacaa acgtttcagc ggctcagtga agctgcccca tatcccccgc 240

ccaaagatga gggtgtgcat gcttggtgat gcccagcatg tcgaccaggc tgagaaaatg 300

ggacttgact acatggatgt tgaaagtctc aagaagatga acaagaacaa gaagcttgtt 360

aagaagctag ccaagaagta ccatgctttc ttggcatcag aggccataat caagcagatc 420

cctcgtctcc ttggccctgg tcttaacaag gcaggcaagt ttcccactct ggttagtcac 480

caggaatctc ttgagcccag gtcaacgaga c 511

<210> 3268
<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316063h01b1

<400> 3268

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gtttgacctg gaaaatgtaa agttggacgc agactgaata agattgtgtg gtgattggcg 120

cctattggtc agatcttgct ccaaagaagg gtgtatttaa ggggagagaa aaagaaaaac 180

gatgcttaga gtgtgtgtga aatgccggct tgcatgccat cagctacatg tccttgacct 240

gcatggaaac ctggctccaa taaaattgat agatcttcgg agcggataca gcgcgtgcga 300

tgtgatttgc tgatgccgtg ttctttttc gttctttgcg tttctgatgc tttggtgaat 360

ggtggccatt tgcttttctg attccagagc catattttca ccttttgttc 410

<210> 3269
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316064a11b1

<400> 3269

caacctctcg ccagtcgcca acgcagacct cagatctcgc tctcgcctcc ttgcgcagcc 60

atcgtcgaga ggagcaagag aatggcggcg agcaacggcc tcgagggtgt gctcctgggg 120

atgggcaacc cccttctcga catctccgcc gtcgtcgacg aggccttcct cgctaagtat 180

gatgtcaagc tgaacaatgc cattctcgcc gaggacaagc acttgcccat gtatgatgag 240

ttgtccagca agggcaatgt tgaatatatt gctggaggag ccacgcagaa ctctatcagg 300

gttgcccaat ggatgcttca tactcctggt gcaacaagtt acatgggttg cattggaaag 360

gacatgtatg gtgaggagat gaagagtgcc gctaaagctg cagagtcact ggtcactact 420

atgaggatga ggctgttcca cagggacatg tgct 454

<210> 3270
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316064b07b1

<400> 3270

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gacctcgccg cccacctcag cgccgcccac gccgtgcccg tgcgcgccat ccactacggc 180

aaggtgagcc ggctccaggt ccccgtgtcg acgccgcggc tgctgctggt caacgaggac 240

gacggccgcg tgttcgtgct caccgtgggc gcgctcggcg ccgcggcgac cgccgtgtcc 300

gtggtgtgcg ccaggggggag cgcggccaac aagccgcggt tcacgtgcaa gatgtgggtg 360

aacctggcgg cggcgaacgg cggcaaggcg gacatcgtgc tggtggagat gcaggtgagg 420

agcaaca 427

<210> 3271
<211> 437
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316064c07b1

<400> 3271

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gaccatatgt caacgccggc gatgaagatg ggcccgtatg gcggcccagg agggaatcac 120

tgggacatta atgctctcaa tccgcccaaa aagattgtga gcatccagat ttggagcact 180

gattcctcat gcgaaggggc cagcggggtc atcaacggca tctcgttcag ctatcttgac 240

atggcagggc aactaatccc ctcgggtcca tggggctccc agaccggtaa accccacgtg 300

attaacattg gtgaagacga gcgcctgatc actgtctacg gcaccagcga tggcaaattt 360

gtcacctcgc ttaaatttgt cactgacagg gctttcgatc cgtatgggcc atacggngca 420

ccgtctacca taagtac 437

<210> 3272
<211> 439
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316064e10b1

<400> 3272

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ctgaggcaat ggcggcgctc gctccgacga agatgctcgg cacccggctc aacttcgccg 120

gatcctccag gtatgccaca gcggcaccaa ctgctggcgc acagaagatc gtctccctct 180

ttgatcgctt caagaagaag cccgccccga agccgaagcc cgcacccgtt gccacctcga 240

gcgtaggcat cgacgacgag ctcgccaagt ggtacggccc tgacaggagg atctacttgc 300

ccaacggtct ccttgaccgg tcggaggtgc cggagtacct caacggagag gttcccggag 360

actaccgcta tgatcctttt ggtctgggca agaagccaga ggacttcgcc cagtaccagg 420

cccttgagct catncatgc 439

<210> 3273
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316064h01b1

<400> 3273

tcgcaggctg agactcgcgc aaccttccca tcccatatta aactcgcccc accccatcta 60

gggtttggcc ctcccaagag acccgcgacc cccttaatcc ctctcccaac ccttatctgc 120

atccctctcc atggccacgg cggcggcggc gaagcggaag ccggtgttcg tcaaggtgga 180

ccagctcaag cccgtcacca gcggccacac gctcgtcgcc aaggtgctca gctccaagac 240

cgtcctccag aaggcccgcg ccgctggcgg ccccggcccg gccgccaagc ccaccaggat 300

cgccgagtgc ctcatcggcg acgagaccgg ctgcgtcctc ttcaccgtcc gcaacgacca 360

ggttgatgtt ctgaagcctg gcacactgtc atatacgcat gcaagat 407

<210> 3274
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316064h08b1

<400> 3274

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cggcaggtct ggaatgttgc caatgtcgag ccctccagca aatccgggac agcttaccat 120

tttttatggt gggtcagtat gtgtgtatga ctcagtgcca ccagagaagg ctcaagcaat 180

catgctcatt gcagcagcag cagctgcggc ctcaaaaagc aatggcaccg ctgctgttaa 240

gcctccagcg atgtctgcga ccaatgctat ccaagccatg cttacgcggt cgctcttact 300

acagagcact tttgtagcaa atggacaacc tcaggctgtt gcggatcctg gctcgatttg 360

caagcttcag gctgatcttc ccatcgccag gagacactcc cttcagcgct ttctggagaa 420

gcgccgtgac ggggtggtga gcaaagctcc t 451

<210> 3275
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316065a03b1

<400> 3275

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ataccaagcc acttgataag tcatggcatg tgatgggtct tggatataat ccaagcatca 120

gccctgaggt tatccgtggt gctgcagtga tacactttaa tggaaatatg aagccatggc 180

ttgatgttgc tttcaaccag tacaaggcac tgtggaccaa gcatgtagac actgaaatgg 240

agttcctcac actatgtaac tttggtctct gaagaaatgc tccaaaaata aggcaaccac 300

caatatattg ttcttttatg ggcaaagagc ccgcacggga attatctatt tttatctgta 360

gcgaagtttc ttacctttgt ggtggacaac tattttcggg taga 404

<210> 3276
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316065c09b1

<400> 3276

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gccggcccag cccatgctcc tggccctcga caccagcgcc gacgccacct gggcgcactg 180

ctccccgtgc ggcacctgcc ccgccagcag cctcttcgtc ccggccaact cctcctccta 240

cgcgcccctc ccctgctcct cgtccatgtg ccccatcctc cagggccagc cctgcccgga 300

ccgggacccc ttcgacagcg cggcgcccgt gccgtcgtgc gccttttcca agccgttcgc 360

cgacgccttc ttccaggcgg cgctggccag cgactggctg catttgggca aggacttcat 420

ccccaatacg cgttcgggtg cgtgggcttg gtgagcgggc cgactttcaa cc 472

<210> 3277
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316065c12b1

<400> 3277

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ctatatcaaa ctggagcgat tacacctttc ttaagatggc tccagcgggc gggaggtgtg 120

gccgctcgtc cgccacaggc tcctgctaac cgtgctcctc tggctgccca gaatgatggc 180

aacgagcaac ctggtggaaa cctcgcagat cctgcaaacc ctgaccaagc cgcggagaac 240

caggaaccag gagcagcagc gggcaacgag aaccagcaag gtgcagaggg agaagcaaac 300

cggcgcagct ggctcggcgg catcttgaaa gaggtccagc tggtcgttgt agggttcgtc 360

gcgtcgcttc ttcctggttt tcagcacaat gactaggtga aagtcttccc gtggcagaat 420

cgaatattgg caccgtaact gtttgtgtga catagggagg aagtacaagc agaggatata 480

<210> 3278
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316065d07b1

<400> 3278

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agattaaaac acctaacgcg tgccttttt taagtatctt taatgcagcc tatcggttct 120

taacttacta ccaactacta gcggagatag ctttctgaaa taagcatgct aagcatgaac 180

gttgttctac ttatgggaag aaccctcagg tgatgatagg tcatggttct ttgccatttc 240

ctttacaaaa tcggctgaat cttgtgattc taagttagta tcaagtccta tatacctttc 300

tgtttgtata aattcacaac tttcatggaa actgtcgaat tgcgagtatt aatctcaggc 360

tgctgggtat gtttgctgat tgtatgctgc catgcattca ctgagccatt tcctgggatt 420

ctacttggga agacccattt gtaaaccgtc ccttttggga at 462

<210> 3279
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316065f01b1

<400> 3279

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cagtgactat tgctttcgcg aggcgtccac aggcactgac gactcggcgt cgccggctcg 180

aggacgtgca gggacaacag attcgtgacc cgagccggac gcgaacacaa cctgacgttg 240

gtggggaaca aggagaccga cttgacgagg gaggccgcgc tcgaccagga gttcatacac 300

gtcaagctat cagaacacat tgggaagaag aaagcgagtc tttccttaaa ccatctggac 360

tgcaccttag tctgcccaac tgagattacg 390

<210> 3280
<211> 469
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316065g06b1

<400> 3280

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ggcggaaggc aaggtcccga cgctggccga ggaatattca ctcccaccca aggaggtccc 120

tgtggaaaaa ccagctgagg agaaatctgc tacgatcact gaggcctcac cagctgatga 180

gcctgctgct gatgttgagg aaaaaagtga aactcctgag gtgaaagagc cagaagcgga 240

agaaactgtt cctgctgcag aggaaagcga tgcggctcct gaggaaactg aagagaaacc 300

agaaattgtg attgagacgg ctccagcaga ttttcgtttc cccacaacaa atcaaacaag 360

acattgcttc acacgctatg ttgaatacca taggtgcgta actgcaaaag gagatgatgc 420

tcctgagtgt gaaaagtttg caaagtacta ccgatcacta tgcccaagt 469

<210> 3281
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316065g07b1

<400> 3281

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gcgataaaaa aaagttgctg ctctgtttct gcaaaacagc atttctgttg tttttgccca 120

tagcttttca ggatcttcga gggctgataa attgatgcta tacaattgta tagctacctg 180

ataccttta gttcatagat caatttatt tacttactcc ccatgagtat tggtgttgct 240

atggatttcc aaagtccgct tcctcattat tcctaaatct gaaaacagca gagatgtttt 300

tgctggtttt gacacctgta acctcataat ctgaggttga atagttggag ttatttgtag 360

atgagttccc catgaatcca taaccatttt gtttgcatgt tttagagctt cctagcttga 420

agagctttga attttt 436

<210> 3282
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316065h01b1

<400> 3282

attaatttta aaaaaaaaaa aaaaaaaata caaggggggt taataaaaaa attgggggca 60

gattaaataa ccctaattag ttct 84

<210> 3283
<211> 176
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316066d03b1

<400> 3283

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tcacgcgcac cagcacggga gctgaccatg atttagtccg tctcgatgga gccgttggcg 120

gaccaccacg ggtcccggtt cggccagatg acggcgtatg tgatgatacc aaacca 176

<210> 3284
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316066e01b1

<400> 3284

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actggagcta agaagttgat taccagaatt ttggacccta atcctgcaac tcgtatcacc 120

attcctcaga tactggagga tccttggttc aaaaagggat tcaagccacc tgtttttgac 180

gacaagtatg aaactagctt cgaagatgtc tatgctgcat ttggagactc agaggaccag 240

catgtgaaag aggagactga acataagcca acctcaatga atgcatttga actgatttca 300

ctgaatcagg gattgaatct ggacaatttg ttcgaggcaa aggaggagca taaaagagag 360

acacgattca cgtcgcaatg ccctccaaaa gaaatcatca gcaagattgc ggaagctgca 420

aggccacttg gatttgacat tcagaagaaa aactacaaga tgcgggtgga gaacctccaa 480

gcaggttgaa aaggcaatct ca 502

<210> 3285
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316066e02b1

<400> 3285

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actggagcta agaagcagat taccagaatt gtggacccta atcctgcaac tcgtatcacc 120

attcctcaaa tactggcgga tcctcggatc aaaaagggaa acaagccacc tgttcttgac 180

gacatggatg aaactcgctc tgaagatgtc tatgctgcat ttgcagacta acaggaccag 240

catgtgaaag aggagactga acataagcca gcctcaatga atgcatttta actgacttca 300

ctgaatcagg gatcgaatct ggacaatttg ctcgaggcca aggaggagca taaaagagag 360

acacgattca cgtcgcaacg ccctccaaaa gaaaccatta gcaagattgc ggaagctgca 420

t 421

<210> 3286
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316066e11b1

<400> 3286

tcgcgccctt tgttttatat gatgaggcgc tcaggttagt ttcatgatga gcagtcgcaa 60

ctcatgtaac gcaattctca agaggtcgta catcaaaact caatttatgt cagctcacag 120

ctcattacaa actaccctaa gggccatatt cttttaacga ttgggggctt aagtcgtaca 180

agatgatgcg acacgtgggc atatttgtat gttgctggta acggccataa gtagattcat 240

gacgagcgaa cgcggacaga ttgtttttcg tgaggggcct cagagttatt acatgacaag 300

cgagcgctac tcaagaaacg caatggcggc ctacaccggg agcgacccg 349

<210> 3287
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316066f03b1

<400> 3287

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acagtagcct ttctgatcaa catctgtatc atatctgcta gtggtgctgt ttgcagcgca 120

gataatttga accctgaaga ccggatgaat tgcattgatc tagatcttaa caaagcttta 180

ttcttgataa agaatgtcct cggaaattgg tgctcaaagg tgaccgctat agccttattg 240

gtatctgggc agagttctac cattacagga acttatgcag gacaatatga catgccaggg 300

tttctggatc ttcagatgac accctgggta cgaaaccttt taacta 346

<210> 3288
<211> 311
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316066g08b1

<400> 3288

tttctatggg cctctagccc tagtggatga gggcctcccc atcatcgtca ttgcgaacac 60

gcgacgcatg cttcagcaag caacagtccg tgatccagca gctcctttct cgcaaggggc 120

gtctgatcat aatgtgttca aagggagatg cctctgctgt caatcccggc ggatcttgta 180

gagtgattga agttccaaag gttgcggact gtctccagcc agtgattaac ataataccat 240

tacagttgct cgcataccat ctaaccgtat cttngtggat tcgatgttga ccaaccaagg 300

aaggctgccg a 311

<210> 3289
<211> 545
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316066g11b1

<400> 3289

ttttaagaga gagcaagcca gccaaggcga ttggatcttg cacctgccaa caaggtacgg 60

ggaagatcat ggcgtccgat ggcaagagca agatccttgt gatcggcgcg acggggtaca 120

tcggcaggca cgtcgtcgcg gccagcgcgc ggctcggcca ccccaccctg gcgctcgtcc 180

gggacgccgc cccctccgac ccggccaagg cgcagctgct caagaccttc caggactcgg 240

gcgtcacgct cctcacgggc gacctctacg accacggcag cctggtgagc gccgtcaagg 300

cggccgacgt cgtcatctcc acgctgggct cgatgcagat cgccgaccag accaagctca 360

tcgccgtcat caaggaggcc ggcaacgtga agaggttctt cccgtcggag ttcgggctgg 420

acgtggaccg caccggcgcc gtggagccgg tcaagtacat cttcgccctc aaggcggtca 480

tccgccgcgc cgtcgaggcc gagggcatnc cctacaccta cgtggtggcc aactaacttc 540

gcggt 545

<210> 3290
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316066g12b1

<400> 3290

caccacccag ggctttgatg accttggcag gcgctgcgcc aagtactatg aggctggtgc 60

ccgcttcgcc aagtggcgtg cagtcctcaa gatcggcgcc accgagccat cgcaggtctc 120

catcgaccag aacgctcagg gtctggctcg ctatgccatc atctgccagg agaatggtct 180

ggtgcccatt gaggagcctg agatccttgt tgatggacct catgacattg accgctgtgc 240

ttacgtcacc gagatcgagc ttgctgactg ctataaggcc ctcaacgacc agcatgttct 300

cctcgagggc actctcctga agcccaacat ggtcacccct ggctctgact gcaagaaggt 360

ggcccctgag gtgattgatg agcacaccgc tcgcaccctc cagaggaccg ttcctgctgc 420

ccgacccgtc attggctttc tctctggtgg acagagcgag gaggaggcga cccttaacct 480

gaacgccatg aacaagcttc 500

<210> 3291
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316066h01b1

<400> 3291

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gggtgttcga ccactgggac gtcatgggct cctatccttt ggaccctggc acccagtcgg 180

cgacgctcga gacggagatc cgcaggagga agggtctcaa ggagcagatg acccctctat 240

ccgacttcga ggacaagctc taaattttgg ggcttcgagg acaaggtcta aattttgggg 300

ccatgttttg ggactggctc ttgctgagaa gggaggcgcg gtaattttct acctatgaga 360

ctcacttact atga 374

<210> 3292
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316066h03b1

<400> 3292

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gctattatta actctgaagg gcctcatcta cacgccctcc ctccactcgc tgcaccacac 120

ccactttacg accaactact cgctgttcgc gcccttctac tactacctga actcaaccat 180

gaacaagact agcgaccacc tctactatcg cacgctgaac agctcagcac gaagcccccg 240

acttcgtcca cctcaaccac ctcaccactc ccggctccct cctccacctc cgcctctggt 300

tcgcctccct cacc 314

<210> 3293
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316066h08b1

<400> 3293

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gtcgtagcca tggccggcgc cggcgccgga gaggaggacg cggcgtggga gcgcgccatc 120

agcgcggccg ttaagagcgc gccgctctgc cccttctccg cccccaaaac cctaaccctc 180

gacggggcca tcaagtcctc caccggccgc ctcccctcgc cggcgctctt cgaccgcttc 240

ccctcgctcg aggagctctc cgtcgcgggc gcccgcctct cctcgctcgc cggcctgtcc 300

cgcctcccgg acctccgccg tctctccctc cccgacaacc gcctcgcggg ggccggctcc 360

ctcgccgtcg tcgtcgagtc ctgcggcggg accatccgcc acctcgacct cggcaacaac 420

cgcttcgccg cggtcgagga gctcgccccg ctcgcaccga tcggggtcga gtcgctggac 480

ctg 483

<210> 3294
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316067b01b1

<400> 3294

caagaagctc atagccattc aaagcctctt catctccgaa gctccaaccc aaccgaggat 60

gtcttgctgc ggaggaaact gcggctgcgg caccgcctgc aagtgcggca acggctgcgg 120

cggctgcaac atgtacccag aggccgaggc cgccggcgcc accctcctcg tctccgccac 180

cgccacccac aaggcgagct ccggcggcat ggagatggcg gcggagaacg gcggctgcgg 240

ctgcacccag tgcaagtgcg gcaccagctg cggctgctcc tgctgcagct gctagatcga 300

tcatcgacca tatgcatgca ccgtgccgtg cgtgcatcat cgatcatatc gatctactac 360

taccatacca tgtaaccgca acctgatcga gggcctttat ctatgcacct gacctgcatc 420

agcagtcagg tgccgctgat gaacagccct aat 453

<210> 3295
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316067b11b1

<400> 3295

ctctggctga gaagaatgaa cggcacatga atgttcaaag agagcaggca gaaagagata 60

gaatttcgga aagtttacac ttcgagatta agcgatgggc tgctggaaaa gaaggcacct 120

tgcgggcact gctatcaact atgcaatatg cactttggcc agaatgtgga tggcagcctg 180

tatccctaac agatctgatc actgctgctg cggctaacaa ggtgtaccga aaggcaacct 240

tgtgcatcca tcctgataag gtgcaacaaa agggtgcaga tctacagcct aaatatatcg 300

ccgagaaggt ttttgctctt cttaaggtgg cctggcacag atttaactcc gctgagctct 360

tctagacatt actatgagga ccatcttcac ctgcgtgagg tactagagga gaagtgcacc 420

caccgcgcat catacctgct ttggctgttt gaggtgctca aggagggaca 470

<210> 3296
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316067c03b1

<400> 3296

gaccctgacg acaagaagcc agaggactgg gacgagagag ctaaaatccc tgacccagct 60

gcagtgaagc ctgatgactg ggatgaggat gccccaacag aaattctgga tgaggaggcc 120

accaagccag aaggatggtt ggatgatgag cctgaggaag ttgatgaccc agaggctgct 180

aagcccgaag actgggatga tgaggaggat ggcgaatggg aggcaccgaa gatcgacaac 240

cccaagtgtg aagaggcacc tggatgtggc gaatggaaga ggccaatgaa gcagaaccct 300

gcctacaagg gcaagtggca tgcacccatg attgacaacc ccaactacaa gggaatctgg 360

aagccccaag aaatccccaa ccctgaatac tttgagcttg acaagcctga ctttgatccg 420

attgccgcta ttggaattga gatgcatgca gagatctttg cacatctatg 470

<210> 3297
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316067d01b1

<400> 3297

ctactcgacg ggagcaggag caatgggacc gagcgaccag ggcaaccacc ggtggcattg 60

atgtcatact aagggagtcg cagcagaaag tgcagctgaa aggggaccct aaggtggtgg 120

cagctgaggc cagagagcaa tacctaaagt tgaaagaaag gttgcagctg cttactttag 180

gtattggtgg cgtcggggtg gtttctgctt atgtttcata cactcctgaa attgctggga 240

gctttagtgc agggctgatt ggatctctgg tgtatctccg catgcttgga accagtgcgg 300

attctttagc gggtggaact aaagcagctg ccaagggtgc tgcggcacag ccaagattgc 360

ttattccaat ggttcttgtg atgatgtaca atcgatggaa tgcgatacta gtttcagagt 420

acggcttcat gcaccagtgt ccatgcgtgg tttactcaga tgttgttcta gcatagat 478

<210> 3298
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316067d02b1

<400> 3298

gagcagcaag cagaaggcca agaagcgcgg gcgcaagccc aagaacctcc ccgcccaccc 60

gtccagcgcc acggaggcca cccagagcga ccggcgctgc agccactgcg gcgtgcagaa 120

gaccccgcag tggcgcgcgg ggccggaggg cgccaagacg ctgtgcaacg cgtgcggcgt 180

gcgctacaag tccggccggc tgctccccga gtaccgtccg gcgtgcagcc cgacgtacgt 240

gagcagcgtc cactccaact cccaccgcaa ggtgctcgag atgaggcgca agaaggagga 300

cggcccgctc acagtcaccg ccaccgcgcc cgccgtggcg tcgttctagc tcgctcgctc 360

gctggctggc tggccactcc gtccgcggtg ggtgtacatt ttcccgcccg tatcagtctt 420

tgtactaccg tactcgaacc cttttcaaaa a 451

<210> 3299
<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316067d07b1

<400> 3299

tacagtcact tcactgatca agtagctggc aagaggtttg accgcagtac aaccttgcat 60

cccggtcgat cgatggcgtc caaggtcgag ctggtggtgg aggtgaagtc gccggcggag 120

aagctgtgga cggcgatgcg cgagtcgacg gagctgttcc ccaagatctt ccccgagcag 180

tacaagagca tcgagaccgt ggagggcgac ggcaagtccg ccggcaccgt ccgcctcatc 240

aagtacaccg agggggttcc gatggtgacg ttcgccaagg agaaggtgga ggtggcggac 300

gacgagaaga aggtggtgtc gtacagcgtg gtggacggcg agctggtgag cttctacaag 360

aacttcaggg tgacggcgca ggtgaccgac aagggcgccg acggcgccgg cgcggtggtg 420

aactggacca tggacttcga caaggccagc gacggggtgc ccgagccgga cgtcatcaag 480

gagaccgccg tcaagacctt tcacgacctc gacgactacc tcctcaagac tagcagcttt 540

tagctg 546

<210> 3300
<211> 313
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316067g03b1

<400> 3300

ggaggaggcc gacatcgaca aggacgggcg gataagcctg tccgagttcc gcaagctcct 60

ccgaaccgcg agcatgagca acctgccgag cccgtccgga gttccgaatc cccaggctct 120

gtgagaatcg gcgaggagca tctatagggg ccggggagat ggtgacgagt acattagaga 180

gtttatttct tcttcttttg tgctgttttc tgcgctccgt gcgatgtgag ggtttctgat 240

ttgttagcat ccaggttctt tgtgcactgg taagggttag agataagttt cagggtaaat 300

attttcgttg aag 313

<210> 3301
<211> 534
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316067h04b1

<400> 3301

gacacatcca ggtccaagca aagcatcccc agccgagccg agaccgcgtg cgctccacgc 60

agcatccgcc gcagcagccg cccagagaag tcgccgccgg agaaggagga ggatgtcgtg 120

gcagacgtac gtcgacgacc acctgtgctg cgagatcgac ggccagcacc tcacctccgc 180

cgccatcctc ggccacgacg gcagcgtctg ggcgcagtcc cccaacttcc cccagttcaa 240

gcccgaggag attgctggca tcattaaaga ctttgaggaa cctggacatc ttgcaccaac 300

tggtcttttc cttggaggca caaagtacat ggtcatccaa ggtgaacctg gggttgtcat 360

ccgaggaaag aagggcaccg gtggcatcac tatcaagaag accggcatgg ccctgattct 420

tggtatctac gatgagccca tgactcctgg ccagtgcaat ttggtcgtgg agaggctcgg 480

cgactacctg gtcgagcagg gtttctaagc ccngcctgat atgatgttat tttg 534

<210> 3302
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316068a01b1

<400> 3302

taaaatttat ataaaaaaaa aaaaaaaaaa aagaaaaaaa aaaaaaaaaa aacaaaaacc 60

aacaaaaaac aaaccaaaaa aaaaaaaaaa aaaggggggc cccccgcaga gggacccccc 120

ttccccgccc gcgggcgcgg cgcggaaact ctcttccagg gggccccaaa gccagccccc 180

cggcccccgc tttccccccc ccggacccgg gaaacccccc gggccccccc ctataaagcg 240

cgggggggca ccccccccctc gcccgggggg ggaaaatgaa gaggggccgc ccccgtttgg 300

ccctccccaa aggtcgcccc cccagtggcc aaggggaccc ccccccctacc gcgccctaaa 360

cggcgggggg gggggggggc ccccc 385

<210> 3303
<211> 90
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068b03b1

<400> 3303

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accgccacac gngccagcgc cccagcgccc 90

<210> 3304
<211> 575
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068c06b1

<400> 3304

ttccacttgt ccgcttcccg tgggggatgg ccgnggtggg cggcaccaac gcctgcctcc 60

gccgcgtcga cgccgccgag gtctacgaca ccatcgcccg ccgcggggta acgcacctct 120

gcggcgcgcc cgtcgtgctc aacatgctgg ccaacgcgcc cgagggcgtg cggaggccgc 180

tgccggggaa ggtgcagatc ctcacggccg gcgcgccgcc gccggcggcg gtgcttggcc 240

gcacggaggc catcgggttc gacgtcagcc acgggtacgg gctgaccgag acggcggggc 300

tggtgctgct gtgcgcgtgg aagggcgagt ggaacaagct gccggcgtcg gagcgcgcgc 360

ggctcaaggc gaggcagggc gtgcgcaccc ccggcatggc cgaggtggac atcgtggacg 420

gcgagaccgg cggcagcgtg ccccgagacg gcgccacgat gggcgagatc gtgctccgcg 480

gcgggtgcgt caccatgggt tacttcaagg acgagggacg ccacccggcg gtgatcccgg 540

acgacgggtg gntctacacg gnggacgtgg gcgtg 575

<210> 3305
<211> 573
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316068c07b1

<400> 3305

tttgcattgg aagaattgac gggtgatgga ctgatcgtgg cctgaatttc tggtgaccag 60

taattagtaa acaagcagct taaaccagct gtcagggcaa agtagttttc agttctatgg 120

ggaagttgta ggatgcagaa gaaaactaaa aattgaagaa tggtcgtgaa ttataacgat 180

gtatgggttt atctattgat tgacagggtt ggtggcaaat ctctcggcag agtttgtgtg 240

tgatgttgca gtcatgttct tgtttgaaga acaggtggat atcgagcata gttaaaaaaa 300

atgcgcgcct aggctctagg cagtagcgaa acacctagca cttaatgtgc gcggcataat 360

tgcgctcaag tgtgtgcttc agaaaagcgc aaggtggtgg caaaacacac aattaatgcc 420

tagcgcttct tttagctttg acattgagct ggcatcataa ctgaatgttt gcagctaatg 480

aaaatggtag agtgctagtc atacatgata tgttcattgg tagccgtcta cattttatgg 540

actgagggtg ctagttatgt caaaatattt act 573

<210> 3306
<211> 554
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068d03b1

<400> 3306

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ccagcgcgcg tctgcacagc aaggccgcct ccaggcagag ggttgacttc gccgacttct 120

ccgggctgag gccggggtcg tgctccgtca gcgccgccgc cagggaggcg tccttctccg 180

atgtcctcgg cgcgcagctc gtcgccaggg cttccggcga gaacgccgtg agggcgccgg 240

cggaggcgaa gctgaaggtg gccatcaacg ggttcggccg catcgggcgc aacttcctcc 300

ggtgctggca cggccgcgag aactcgccgc tcgaggtcat cgtcatcaac gacagcggag 360

gcgtcaggaa cgcgtctcac ctgctcaagt acgactcgat gctgggcacg ttcaaggcgg 420

acgtgaagat cgtggacaac gagaccatca gcgtcgacgg caagaacatc caggtcgtct 480

ccaacaggga ncccctcaag ctgccatggg ccgagctcgg catcgacatc gtcatcgagg 540

gtactgggag tgtc 554

<210> 3307
<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316068d05b1

<400> 3307

gaggaggcca agaccaaaga agaacagaaa ggccgcgccc gcccgcgggg ggaacaacag 60

caccgggacg gcagcccgac ggggacgaag gaaaaacagg aacccccccgc gggagagccg 120

aaagaggagc aggaacac 138

<210> 3308
<211> 544
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068d07b1

<400> 3308

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gattgctgtt catcctatgg actaaacctc tctggttcat atagacaccg gagagggcta 120

gggttacaca gagtcggtta caatgggagg agatctacat atcgtattgc caagcttgcc 180

ttccacgcca aggaaagtcc cattcggaca cgggacgaag tcttcaatct tgtatcttca 240

tagtccggga gttcggccaa aggctatagt ccggccatcc ggacaccccc taatccagga 300

ctccctgagg cacattatct ctttttagtc tgtaagcctt cgggccttcg ttaaatttag 360

aacttgtaat cccttgctca tgtttttcat tccgtatgaa ctgtacctgt acgggattgt 420

tntaatgaaa aagggatgtt cgccggggtt ttcattcgtg ggtgaaccct atgacaagga 480

gccgaatcct cgtattattt aagaataaat gttttcgccc agcaacaggc ctttccgtcc 540

ccca 544

<210> 3309
<211> 360
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068d10b1

<400> 3309

cggagcggga gcgcaccang acccagacag attcagngac gctgccggcg gaccccgacc 60

aggacgagac cgcacaaccg gagcaagcac ggccacgccg ggccaaaggc accgccgcgg 120

aggaggacca agaccaaaag aagaaaanga acggcacggc ccgctcgcgg ggggaacaaa 180

acaaccgaga cgnaaggcca accgggacga aagaagaaaa gaaccgccgc gcggagcagc 240

agaaagagga gcgggaggac acgaggccaa agctaggcac tgggacgggc gtacaacgac 300

aacgaccgtg aaagaccaag gcgtacccaa accaaatcga catggagcag aagcacattc 360

<210> 3310
<211> 521
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316068e02b1

<400> 3310

tggcgcgtgg ccctggtgaa ctacggcaag gactacggcc gcctcgtcgt catcgtcgac 60

gtcgtcgacc agaaccgggc acttgtggat gctcctgata tggtcaggtg ccagatgaac 120

ttcaagcgtc tttcgctgac cgacatcaag attgacatca agcgtatccc taagaaggca 180

actttgatca aggccatgga ggaagcagat gtgaaaacca aatgggagaa cagctcatgg 240

ggtaagaagc ttgttgtcca gaagagaaga gcatcgctga atgactttga caggttcaag 300

gtcatgttgg ctaagattaa gaggggtggt gcgatcaggc aagagcttgc caagctcaag 360

aaggaggttg ctgcttagat tatcttagtg gatggcatgt tgagtttttt gttccaagtt 420

ggatctgctc tatgttccag tgttcttaaa gccagaatta gtacaactgt tttcggagaa 480

ctacttcata ttttgtcatg gctgttattg aatacccaag c 521

<210> 3311
<211> 340
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068e06b1

<400> 3311

acgcacagcg cgaaggcacg aacgccnccg ttccgcttcc cgataaacgg gtagactttc 60

gtcgacccgg cgcgcggagc gaccaggatg caggttgcac cgcggacgct gccggccgac 120

ccngacgcag gcgaggccgn acaacgggcg aaagcagggc cccgcggggc cagnggcccn 180

cggaggagga ggccacgacg aaagangaac ngaaagcccg ccgccgcccg cggggcgaac 240

aacagaaccg agacgccagc cggacgggga cgaaagaaga acaggcgctc cgngnggcag 300

agccgaaaga ggagcnagan gacacgaggc ccaagcncgg 340

<210> 3312
<211> 420
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316068f02b1

<400> 3312

tgctaacacc ggccagcgcg ccacgcgaga tgagaattac acagcgctgg cgcgcgagcg 60

gacccggaaa gganggccgg cggcgcggac gcggacgggg ggcccaggag cggcgnggcc 120

acggactaca cgaggagcag caagcgggcg ctggagnggg cccgccggaa cctgctccga 180

cggggctgac accgtagtcg agctccacgt gcagcgacac aggagctagg aggccaagca 240

cgccatttgg gccaagacct gatccacact aatccctctg ttcgagctcc gcgagcctga 300

agtgatgaaa aactacggaa tgacctgcga cgccgaggtg ctcgacatgc tcgacaccgc 360

cgtgcgccac attgagctga aagtggtggg gaacgtgtac tggggccatg ccagggaaaa 420

<210> 3313
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316068f06b1

<400> 3313

ttagtctctc gagacagttc cttcccggcc cgatcccgta tcctctccgc cggcaacgct 60

cgtcgaagaa gtgatggggg aggtgctcgg cgtgttcttg tacatagtag atgtaggttc 120

agtttccgtt ctggtgtgtt gggcgtgatg cctaggactg gcgatatgcc gatgaggagc 180

gcgccgcctg cgcgtacgag cagcgcatgg tggctagcgg cgatgctttg gttggtggcg 240

gtggcgtggt gctactcgct gctgcgtgat tcatcgacgg cgcatcctgc aataagctcg 300

gttgctgcca tgatttggag aaggattcgt ccccttcctc tgttgcttta agctgacatg 360

gaggtggatg gagcgatggt gatgctagag gatctggttt ttgcaggtgg gttcggagca 420

tattagcagc ggcagaacag gtggagctac agcgcccgct ggcagccggt ctttcacacc 480

atggcgttgc ccc 493

<210> 3314
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316068g09b1

<400> 3314

tgcttattcg gaggcgaggg gctactacaa gcatccatct cctcaaagaa gcggatgtgg 60

tattcattct atgttggcat ggcggttgcc atcttctgga catactacct cttgaagtta 120

ccaaggatcc gatgggatgt agtgtggctc ccgcttggcc cttcgattgc ttctgcattg 180

agcctctatg tggaccatat gctaatgaag tcgatgcaag atatcagcac cttgaggggc 240

tacatgtaca acttcaagtc cctgtgatgc taagcatact tctcgtctgg gtcatgcact 300

tgcctgcact gtgtacatgg gataccgcat cattcgtgtc tacttgcgac ctctcgttct 360

cgacttcaga acgtcaagtc aaaattt 387

<210> 3315
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316068h08b1

<400> 3315

tgctggcacc gaggggcgcg gcagtggggc tggcaatggt gatcgcggac atgggggggg 60

cgccgccggc gacggtgcac gcgggcatat cctgctgcac ggtgtacagc acgctgatgc 120

cgtgcctgca gtacgtgcaa cagggcggct cgccagcccg gggctgctgc accggcatcc 180

ataacctgat ggcggaggcc aacaacagcc ccgaccgccg caccatatga ggctgcctca 240

agaacgtcga caacggcgcc tccggcgggc cctacataac ccgagccgcc gcgctgccct 300

ccaagtgcaa cgtcggcctc cgctacaaga tcagccccag cgaagactgc aactcgatcc 360

actgaacgaa ctgaagcgcc ttggcccgtg tgtcgacgta cgtctgccgt gcgagga 417

<210> 3316
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316069a05b1

<400> 3316

ccgcctcgga gattccgcgg gccgatccca cagcgtccgt ttttccacag gtttaggtgc 60

tatgggtgcg gctgggggtg tcagggctca caagggggac atggaagccg tcgactagaa 120

cttaaacggc cagagcaaag aggccgagaa ggtggagaca cttgaatcaa ctgggacaca 180

cgaggtgggg atgacgcgct ggttcacctc cgacgcgtgc tgctaggacg ggttcagccc 240

tgtgtacctc tcacggctct gcgacagact ctgccacg 278

<210> 3317
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316069a09b1

<400> 3317

gtctcgtcgg cgcgctgctc gcgctcctcg tcgacctctc cgcctcgtcg cacctcgaag 60

cccacggcca ccagcagccg cagcaggagg agggccagcc ctacgcccca atccccacca 120

ccaagaaggc ccccgccttc gagctcaccg gcgaaatgag ccccaggaaa cgcgctttcc 180

tggacgagag tgaccgcgac gacccggcgc cgcacgccga caagaatggc ggcgagccgg 240

accgggacga cgtggcgcta ttcggtccca agaaaggcgc ccggctgccc cgcagcgatg 300

agcccgtggt ccctattgtc gggtgccatg gcgctgggca tgaggtggtg gaggtc 356

<210> 3318
<211> 510
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316069b01b1

<400> 3318

cctacgcgtc cgccaccatt ttcacagcaa caacaaatac cagttattca tccatctgtt 60

ttgcagcagc taaacccatg caaggtattc ctccagcagc agtgcatccc tgtggcaatg 120

cagcgatgtc ttgctaggtc acaaatgttg cagcagagca tttgccatgt gatgcagcaa 180

caatgttgcc agcagttgcg gcaaatcccc gagcaatccc gccatgagtc aatccgtgct 240

atcatctact ctatcatcct gcagcagcag cagcagcaac aacaacaaca acaacagggt 300

cagagtatca tccaatatca gcaacaacaa ccccaacagt tgggccaatg tgtctcccaa 360

ccccaacagc agttgcagca gcaactcggg caacaacctc aacaacaaca attggcacat 420

ggtacctttn tgcagccaca ccagatagct cagcttgagg tgatgacttc cattgcactc 480

cgtaccctgc caacaatgtg cagtgtcaat 510

<210> 3319
<211> 397
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsf19316069c09b1

<400> 3319

atcggttcaa atgccataac caaaaataag gcgctgccgt ccgtggatct tgtaccgagt 60

atatcactgc atcaagagac tttgcagggc acagattctg atgatgagac gataggatct 120

ctgcttagta gaggaaagaa gaaacggtta tcgacatcag atgttacaga gaataaacaa 180

gaacacctag attcttcgaa gaacattggt ctgggggttg agactatcgg ttcaaatatc 240

ataaccaaaa ataaggagct gccatccgtg gatcttgcac caagtatatc tgaacatcaa 300

gagacttcgc agggcactga ttctgatgat gtgaccatag gatctctgct tgtagaggaa 360

agaagacaag ctatcaatgt cagattttca gagaata 397

<210> 3320
<211> 547
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316069e01b1

<400> 3320

ctcacgcgtc cgcccacgcg tccgcgcctt gttaatcttc agtacctgga gctgtacagg 60

aacaacctca atggcgagat tccaaaagag ttgggcaagc tgaagaattt gatcagcttg 120

gatctgtatg ccaataagct taccggaaga atccccaagt cgctttccaa gctcggctca 180

ctgagattca tgcgtttgaa caacaacaaa cttgctggat caattccacg ggagctggcc 240

aaactctcca acctgaaagt cattgatttg tctaacaatg acttatgtgg gacgatcccc 300

gtcgatggtc cattctcaag cttccctctt cgaagcttcg agaacaacag caggctgaac 360

ggcccagagc tgcaaggatt ggcttcctat gactttggat gctaggaagc gccgacgcac 420

acgacaatgc acgtggaagg aaggcagaaa aaatatagta gtacaacaca tagtatggag 480

cctagcacta caacatgtat ggcttgcgat acatgcagca gaagatgaag aaggttgtga 540

gcatagg 547

<210> 3321
<211> 429
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316069e05b1

<400> 3321

gtccgctgtc atgggtttgt aagggtggct cggtattcag aagtttcaaa tcgtaccgag 60

cctttcaaac ttcaaaaggg cagtggtagg aggcggacag tggagagaga tttggatcaa 120

ctgcaacaat ccagattggg ggaggccgat ggctttgaag tgattcatgt cactgggaag 180

catccatttc tgtggcctga tcattggcca gtgaaagact atgccaggat cttcgattgc 240

cttgctgtag ctcctgagat agaaactgaa gatgtcaggg tcatattcaa gattaaagat 300

gcagggaaaa aagcaagaca tgatgctgcc gtttctcata atacgaagag gatcgatggt 360

ttgaaaaatc ttcctgtgca gtacattgct gttcacatga gaatcgagaa agattggatg 420

attcattgc 429

<210> 3322
<211> 518
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316070c12b1

<400> 3322

tcaatgtcag tcggagcgag aggaggccga ggcgagcaag aggatcgctt gggtgggcag 60

ggacgagccc gaaggaagca acctgtcgcg gtccccccag acggtggaca ccgcgcggga 120

ctgcgacgtg atcatgttcg acaaggccgg cgcgaacaag ggccacatag acctcaactt 180

ccaccccgcc agccgcgagg aggagcagca gcatggcggc cagccccggg tgagcatggt 240

cagcctcctc gaggtcgcga accgcccccc ggagagctac atgaagcaga acggcctcgt 300

gagcctggcg gcggagcagg ggagcagctt gggcacggcc acagtcccgt ctcagcccgc 360

tccgatggag agcgaagagc ggccctccga cgaggggcgt gccgtggcgg tggagcacga 420

gcgagagccc gtggacaaca tgttcgtcga cgaggcagcc tgtgagaacc agggcaatgc 480

tgccagtgcc agtgacatcg ctgctacctg acctgagc 518

<210> 3323
<211> 515
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316070f01b1

<400> 3323

ttagaaagat ctcagcctgg tgctctttgg gatgtctttc gcaggcagga tgtgccgatg 60

ctgaataaat atttagcttc taactgggag gaacttacaa ataacagtca ggcgatgctc 120

tctgtgaagc atcctattta tgatcaagct gtatatctca gggagcatca taaaagggta 180

ttaaaggatc aatatggaat tgaacctcgg acatttgaac aacatattgg cgaggctgtt 240

tttattccag ctggctgtcc ctaccaagta aaaaatctcc agtctacggt tcagttggct 300

ctggattttt tgtcgcctga gagtttgcgg gagtcggctc gtatgggcca agagatacgc 360

tgcctgccaa atcatcataa tgcaaaactg aagatgcttg aggttggaaa gatagctcta 420

tatgcagcag gttccgctgt caaagaaatt cagaanataa cccttgatcc caagttaatt 480

cggatattag atttgaggat cagaacctaa ccccg 515

<210> 3324
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316070f04b1

<400> 3324

taataaaaaa aaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaaggagaag acgcgaggag 60

acaaaaaaag agaaagagaa cgaacaaaag gagaaaaaaa ggacaaaaag gggacaaaga 120

aacagagggg aggagagcca aggaaaaaga agaacagggg gggggccacc gcaaggggg 179

<210> 3325
<211> 416
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316070f07b1

<400> 3325

ggcccggaac ccccgggccg acccacgttt gattaaaagc aaaccagcgc gagggnggac 60

cgagaaaaaa aaaaaaaacg aaagacgcaa caaacgggcc gcgcggagag agganccaag 120

caacacgacc gcgngaaggc cacgccagac canggcaaca gggcggcgga gaccaagacg 180

aaagaccaac gganagcacc gccccgaccg ggaaaacaac aacggaaccc aacngaaagg 240

ccgagaggga caaaagaaga accgaggcgg cgngaggcag aacagaacga ggaccanggc 300

cacaccaagc cgaagcgcag cacggaacgc caaaggaacc cgcccggcag cgaaaaccaa 360

gcgcggccga agngagaggg acgggcagag agaccgctac acgcggcagg ggccaa 416

<210> 3326
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316070f11b1

<400> 3326

tttactcacg aacaagctag ggctggagcc gatgcccctc cggtctgccc gccggagctc 60

cgtccgcccc tcttctccat cttctccccc cacctctact cccccaggcc caactgtggt 120

ggatggcatg cccgccggcg ctccatactc ccctgttcta catctttccc ctcgccatct 180

ccctcctcac tccctgttcc gcccccaccc ctactgctgc aggctcaacc atggtggtca 240

acacggggat gtgagcgtga acggacggcg tcggcggaca agagatgcgt agaggacctc 300

aagtgctgca gacgctggcg aggtgagaat gatattgcac tgatgatgga gcgcatgtag 360

cacatattaa tcatgtgcat tgcccattat tgaatatcag atattcca 408

<210> 3327
<211> 496
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316070g03b1

<400> 3327

tgctgccaaa cagcagtggt agtcaaactg tccagatggc cagctctctg cttgcggccc 60

gccattctgg tgagaggata ctgcgctgct ggggtggggg cactggctgg gctgtggaag 120

atgcaaaaga caagatctcc aagctccttg aggagtacaa caccggcggc gacctgaagg 180

aggcctgcca gtgcatccgt gaccttggga tgcccttctt caaccatgaa gtggtgaaga 240

aagcgctggt gatggcgatg gagaagcaga atgaagctag catcttggct ctgctgcagg 300

agtgctccag cgaggggctg ataaccatca accagatgac caacggcttc gcccgtgtca 360

aggaaggcct cgatgatctg acccttgaca tcccgaacgc gcaggagaag ttcagaggct 420

atgtggagct cgcgacagag cgcggntggc tgctaccttc cttcgcctcc ctgccctgag 480

ctctttcccg acagac 496

<210> 3328
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316070h02b1

<400> 3328

tcctcacgcg tccgcccacg cgtccggcta cggcggcggt ggtggcggct acggaggcgg 60

tggtggcggc tacggcggtg gcggtggcgg ctacggtggc ggtggctatg gaggcggcgg 120

tggcggcggc cgtgggtgct acaagtgtgg cgaggagggc cacatctcca gggactgccc 180

ccagggcggc ggtggcggct acggcggtgg tggctacgga ggaggcggcg gcggcggcgg 240

cggccgtgag tgctacaagt gcggcgagga gggccacatc tccagggact gcccccaggg 300

cggcggcggc ggcggtggct acggaggcgg tggcggccgt ggtggtggcg gcggcggtgg 360

cggctgcttc tcctgcggcg agtctggcca cttctcccgc gagtgcccca acaaggccca 420

ctaagcggcg cagctcgtca gatctga 447

<210> 3329
<211> 547
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316070h12b1

<400> 3329

tttgctgtta agaatcagaa gaaaaacaag aaactagggc gtagcacggt ggtgccagat 60

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tctagtacta ttgttgctgc acggcctgat tttgatctgc cagaagaggt ggaaaaattg 180

gtggaggacg accagatctg tcctcagatt aaaaacaaaa acaaagggaa ggcaaaggaa 240

acagatgttg ccaggccaga agttaagatt caggaaaaga agaaactacg gcgtagtacg 300

gtggtgccag atgcttcctt acgagatggc ttagctgagt ccgcttcagc ggccagtgtg 360

gttggacaag gctctagtac tgttattatc aataagatca tatcaagatc aatagagaat 420

atgaatttgg tgacatccat tgacgcgcac cccactaagc catggattgt gacgggtcat 480

gagagaggga atgtttccat ttgggactac cagaagaagg aactgtgatg agtttgcagg 540

tcaatga 547

<210> 3330
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316071a03b1

<400> 3330

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ccaggacgag tccgtgcacc tgcaacaggc atggccatgg cccgtcaggg ccattgtgtg 120

tatgaggacg agaccatgaa gaaagaggaa ctgagtgtcc gcctgctgtg ggtgcaagaa 180

cacctgaacc gcgatgtgac cctgacgaag acaaaagaag aactgccgct gcgagaggta 240

aaacaggaac aggagcacgc taacactagg cctgagactg gcactggccg tacaactaca 300

acactgggaa tggcaaaacc ctgcccaaat caaacttaa 339

<210> 3331
<211> 513
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316071b01b1

<400> 3331

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ctactcaggc ggaccgactg atgcgcgggg ccatcgacca cttaggacgg atggtctacg 120

ccgaggccga cattcgcagc accgtcgggc aactcatcga ggtctatggt gaggatgctt 180

cgctgttcct gaaggaagat gactaccggg tcgtgcagga cgcactattt gagaagcagg 240

agcaggaaga gcagcagcag gagcctaaac aaaaggaagc agcaatgtct gaggcaccaa 300

cagcaagtga catgccaatt gtggacatgc acaatgagat gccacctggg gctgagttat 360

cagtagaggg agtagaccct atgcccatcg acccgactgc tcctgaggct acaatggtac 420

atactgcagc tacaggaact agtagagcaa gggcgtcctg ctatggatgg attagcgaat 480

ctgagagtga ttcggaatat gaaaaatacc tcg 513

<210> 3332
<211> 141
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316071b08b1

<400> 3332

tctgtacagg acccttttctt actttcgcgc acctgcgacg cgataggtct gctatagtgg 60

cacctaaatt caccgctcta ggccgtcgct tgacaatcgt gagtctagga aaaccctgtg 120

gcttcccaac tgaactcgcc t 141

<210> 3333
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316071b10b1

<400> 3333

tttctctttt aagaaatgcg tcaagttgcg gaagcaacga atccagacct ggcgatattt 60

gtgatggatg gcagtattgg tcaagctgcg tttgatctgg cacaagcatt taaacaaagt 120

gcttctgttg gtgctgtcat gattacgaaa ttggatggtc atgcaaaagg aggcggcgca 180

cttagcgcgt ttgcagctac ataaagtcca gtgatattta ttggaactgg agaacacatc 240

gatgaatttg agattcttga tgtgaaacca tttgtcagcc gtctgctagg tatgggagac 300

ctgtctggct taatggacaa aatgcaggat gttatgcctg ctgatcatca tcctgatctt 360

ctggcaaagc tggctgaaag aacctgcact ctcagacttg tgtatgatca attccagaat 420

cttctg 426

<210> 3334
<211> 342

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071c03b1

<400> 3334

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cgtggggccg gcggtcaacg tcctggttga gctgggcctg tctctgctgc tatcttgctg 120

ggtcggctac ccgaatccgg gagcgatacc ctgggagccc aggctttatc agacgctagg 180

ctgggtagct actgggctct tctgggcctt cgtcatgctc ccgagaaggg gcatgaacgt 240

ggataggacg ctgggctttg ggctccttgc catatatacg cgatgcttga gtactactcc 300

ctgccttttt gctcaattta aaggctccaa cggcttttcc ct 342

<210> 3335
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071c04b1

<400> 3335

ccggagcgcg gacggacttt ccccgttgcc cgacacgctg taagaatact gaacacccag 60

aaacgagaga gcaccatgac aaagaaagaa ccggtaccgc tgatgccgga ccctgacgag 120

gttgagttcc ggcaactgca ataatcatgg cccggccggc cattgcatat gtgcggatga 180

gacgagccaa agaaaacaga acgccccgcc cgctccgggg cagcagaaca accggactca 240

cccgaccggg cgaagaagaa cagacttgcg gtggagagca gaaagaggag atcgcgacac 300

gaggcctaag ctaggcactg gacggggctg tacaacacag cgactggaaa gacaagaccc 360

tacccaacc 369

<210> 3336
<211> 588
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316071c12b1

<400> 3336

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cgccgcgctc ctgctcgtcg cctccgcgaa gaagtccggc gacgtctcgg cgctccagat 120

cggcgtcaag tacaagccag aatcctgcag catctcggct cacaaaggtg acagagttaa 180

agttcactac cgtggaacac ttaccgatgg aacagttttc gattctagct ttgaaagggg 240

tgacccgatt gaatttgaat tgggcactgg tcaagtgatc aaaggatggg atcagggaat 300

tttgggcatg tgcattggtg agaagaggaa gctgaagatc ccttcaaagc tcggctatgg 360

ggatcaggga tcaccaccta ccattccagg cggagcaact ctcatattcg acacagagct 420

tgtcgctgtc aatggcgagc catctagcac atcagaggag gatgacgctg atctgtaggc 480

agctcggcgc agcacgatcg ccccagtatc aaatcgaata ggactatgta tgggaanact 540

actcttgagg gcagacacca tgaggcaggt acattgtctt accatgat 588

<210> 3337
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071d02b1

<400> 3337

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gtttctttct tctcggcgag cgaggagctt gtcgagacgg ggcgcggcaa gatcgagatc 120

aagaggatcg agaactcggc caaccggcag gtgaccttcg acaagcgccg ggcccggctg 180

gtgaagaagg cccgacagat cggcgtgctc tgcgacgcca cggtaggtga agataacttc 240

tccagcgccg gcgagctcta cgactttggg acgcccaaga ccacgctgcc aaggagctcg 300

gagaagtacc agaccaactc cgggaagatc ctgtgggacg agaagcacaa gagcatcagc 360

gcggagattg acagggtgaa gaaggagaac gacaacatgc agatcgagct cacgcatatg 420

aaatgcgagg atgtgaactc g 441

<210> 3338
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071d12b1

<400> 3338

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gagcgctgtg ggtcagttgc acaccacctg tcgtcagggc tacggtcaca tggccactgt 180

agccgtaggc agaagcgcat gcacagacat gaacgaacac gtgcgctgct ttcgtgtgag 240

aaagaactga gacaccacat gtgcagagac agaaggagag acgagctgcg ccagtgggcg 300

aacagagtgc gcgtgaccca aa 322

<210> 3339
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071e11b1

<400> 3339

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ccgaccgatc tcgatcatgg aggatgagag gagcacccag tcgtaccagg gaggtgaggc 120

cgccgtgcag gtggaggtga cggacagggg cctcctcggc aacctcctcg gcatgaagat 180

ggcggcggag gacacggaga agaaggagga ggagctggtc accggcatgg agaaggtctc 240

cgtggaagag cccgaggtca agaaagagga gcacgtggat ggcgagaaga aggagaccct 300

cttctccaag ctgcaccgat ccagcttcag ctccagctcg tctagtgacg aggaagaaga 360

ggaggtgttc gacgacatca gcgaggtgat caagaggaag aagaag 406

<210> 3340
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071g09b1

<400> 3340

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aatttccgac caccagggag ccgaggagag agggcaccat agaagcaccg agtaccgctt 120

gatgctggac ggctgacgag agaagagttc gtagcaacgg caagaaggca gggtcatggg 180

gggccagagc cactgtgtgg cggaggccaa gaccaaagat gaagaggaag cggcgcccgc 240

cgcgggggag aacgagcacc gggacggaga cggacgggga cgaaagaaga agagagactg 300

gggcggcagg agggagagag gaacgaggag acagaagagc ccaaggccga aactgggcac 360

tggtcgacaa cgtacagact gggaaaaggg agaagcttgc caacacaaaa gccaag 416

<210> 3341
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071h02b1

<400> 3341

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tttgaccacc ggggacccgg cgcgggagtt ccaccatgat cgaagccgga ccgtatcggg 120

ctgctggctg acactgatga gtgtgtgctg ggacagccgg tgctgttatg gtgctgcggg 180

ggcaaccggt atctggggag gagaccatga cagacgagga tctagtagac ccgtctgctg 240

tgtatgtacg aacaactgat gccgcatgtc aatgctgacc gaggacgaaa gaagaactgg 300

agctgcctgt gggatatgtg atccttgcca tagatgacac gaggt 345

<210> 3342
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071h03b1

<400> 3342

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gatgagttcg tgcacgtgca actggcgtgg tcatggccct ccagggccat tgtgtgtctg 180

aggaggagac catggagaaa gaggaagtgc gtgcccgcct gcggtcggag caagaacaac 240

ggaaccgcaa tgtcagcctg acgaaaacaa aagaggaact gcggctgcga gtgcgaaaac 300

tggaagagga gctcgctaac actaggccta agcctggccc tggccgacga ctacaacacc 360

gcgacagcaa aacc 374

<210> 3343
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316071h10b1

<400> 3343

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atgtaggcat gattcaagag gcggatatcg gggtagggac cagcggtgcc gaagggatgc 120

tggctgtcat ggcgagcgat gtttccattg cgcagttcca cttccttgag cgcctgctgc 180

ttgtccatgg gcattggcgt tatagcagga tctcatcaat ggtatgctac ttcttgtata 240

agaacattac attcggtgtg accctgttcc tgtacgagtg cttttcgaca ttctccggcc 300

agactttgta caacgactgg tccatgtctg tctacaatgt gcttttcacg tcactgtctg 360

tgatcgccat gggcgtgttc gaccaagatg tttccgaccg gttctgtctc aagtacccga 420

tgctctacca agagggccct cataacctgc tcttgcggtg gtgaaggctc ctaagctgga 480

tgctgca 487

<210> 3344
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316072e02b1

<400> 3344

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ttgtccagac attggggcag aaggatcatg tctgcctaaa ggagggctca atcaacatcc 120

caccatatgc tcctccccag aaaaagaaaa ctcaccttgt acccccggag accccgcggt 180

ccatctttgt gtattaacgt ggattgtact acgatacggc gaatgacccc gagggtggtt 240

actatgcaag aggtgcccga gcgtcggtgt gggagaactt caagaacaac ccactgttcg 300

acatctagac ggaccacccg gccacctact acgaggacat gcagcgcgcc atcttttgcc 360

ttagccctct aggctgggct cgcgggagcc cccgtatcgc ggaggcggtg gtgttcggga 420

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accagatcgg ggagttcgtc 500

<210> 3345
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316074g10b1

<400> 3345

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cgccctttac aacggtttac caccggcgag ccgtcaccag agttcaccaa gattcagtta 120

gtgctgctgg ttcacgcttg agtgaccctg aggacggtca agctcgtaca actgtggtca 180

tcatgggcct tcggggccat gggtagtctg ccgaggagta cgtgaaaaag gatgaccggc 240

ttggctcgct gcgcgagcag cgggaacaac ttgaccgcca ggccgggacg acagaggcga 300

aggaacaact tgcgcttcgt gtggcagagg atctaagagg acctaggtca caccagggct 360

ctgctcggcg ctggacaacg ttctacatcg tcatgactgg gagaaaccta gcgtaaccga 420

actgaatcac attgca 436

<210> 3346
<211> 156
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316074g11b1

<400> 3346

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atgagtgtga gaacgtacaa ctggtgcaat catcgccatt agggaccttg gttgctatgg 120

ggcgtagggc atggcgaccg ttgcacggga tgaccg 156

<210> 3347
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316074g12b1

<400> 3347

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tggaccttag ggtctatgtg atgtatttgc aggcgaacat ggagaaagat gcacagcttg 180

agctcgctgc tggagctggt gaaccgatat gactgtcttc cgggaccgaa ggagaagatg 240

gttactactg gcgttatagg tgaaagaggt gaaagaggac ctaggtgata cgggtgcgaa 300

tgttcggagg ttgacaacgt ttttcaatgg gaaaaccttg gagaaaccta acataacctg 360

cttgaat 367

<210> 3348
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075b03b1

<400> 3348

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ttttaacctc cagaagacaa aaatgcaaat gggcgttcaa gttcttgtat ctgatacaag 120

agaacttgag aagatccgtc agagagaatc tgacataaca aaggagcgaa ttgagaaaat 180

tctcaaggcc ggtgctaatg ttgtattgac catcaaggga attgatgata tgtcattgaa 240

gtactttgtt gaggctggag caattgcggt gaggcgtgtg cgtaaggagg atttgcgtca 300

tgttgccaag gcaactggtg caacaatggt aaggaccttc tcatagctat gatgaagcag 360

tactaagtat ttcaatattg taattctttt aatttcattc atgacttgtt gacttcgatc 420

tcatgaactt acttgtgatt gcaattgtag taaagttgag cgattctgtg cttaag 476

<210> 3349
<211> 501
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075b04b1

<400> 3349

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acgagggcct cccgcccatc ctcaccgcgc tcgaggtgct cgacaacagc atccgcctcg 120

ttctcgaggt cgcccagcat cttggcgaga acgtcgtgcg caccatcgcc atggacggga 180

ccgaggggct cgttcgcgga cagaaagtcc tcaacaccgg atcccccatc actgttcctg 240

ttgggagggc cacccttgga cgtatcatta atgttattgg tgagccgatt gaccacaagg 300

gtgacataca gacacacgac ttgcttccta ttcatcgtga ggcccctgct tttgttgagc 360

aagccacaga gcagcaaatt cttgttactg gaattaaggt cgtggatgtg ctcgcacctt 420

accaaaggtg tgggaaaatt ggtctcttcg gtggtgcagg agtgggtaaa actgttttat 480

tatggagttg atcaccatgt t 501

<210> 3350
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075b12b1

<400> 3350

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cctgtaatgg tcacagcttc tggttggcca tggcatagtg cacgcaaaga accggctgcg 180

gatgttgata atgctctggc ctacaataca aatctcatac gccatgtact aaataactct 240

ggtaccccta gccagccaaa taatcaagta agcacatacc tgtttgagtt gttcagcgag 300

gatcttcggt caggatctgt tttgggggaa agttggggga ttatgtttac caatgcaagt 360

gcagtgtact ccctgacatt tgaagatgtg gctacagcta gtactgattc accggctctg 420

cacgggattg tttgtgtgga aattcaagtg caccccatag tgca 464

<210> 3351
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075c06b1

<400> 3351

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ttcaacaatg atgactttca caatatcact ccggctcaaa gcaataacgt agcctgtgag 180

gcgactgggg tgcgttggtt aggaatgtaa aacgcaattt ccgtccccgg ctccaggcgg 240

tggatatgca gcccctcgcc atacaataac ttcacgcgat gatggacatt cagcaggcca 300

attttattgc ccggcatttc attcgcttcg acccgctcaa tcacctttgg atcgatgccg 360

tgcccggtat ctcgcaccgc aatgcgtacc cgatttccgc actctgcaac gctgatggtg 420

acaacgcctc tacctttgca ggctgaatac c 451

<210> 3352
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075c12b1

<400> 3352

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ggacaaggag gagcaggctg agttcaagaa gatgtttgac cttattgagc agtacaacct 180

gaatggccat gtccgctgga tctccgctca gatgaaccgt gtccgtaatg ctgagctcta 240

ccgttacatc tgtgacacaa agggtgcctt tgtgcagcct gctttctatg aggctttcgg 300

gcttactgtc attgaggcca tgacctgcgg tcttcctacc tttgcaactg catacggtgg 360

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caaggccttt gctctgctcg ttgagttctt tgagaa 456

<210> 3353
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075e06b1

<400> 3353

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ctagagttca gcaaggaggg gttcatcttc cgtgagcaca acgcatcccc tgggtactac 180

gatggccggt actggacaat gtggaagctg cctatgttgg gatgcaccga cgccacgcac 240

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ggattcgaca acatgcgtca ggtgcagcgc gtcagcttca tcgtcttcaa gccaccgggc 360

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tagcagtgtt gcaactctga cattgcttt 449

<210> 3354
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075e12b1

<400> 3354

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accatgatca gtctccaaga agaaccgccg cgagatctgc aagtaccttt tccaggaggg 120

agtctttggc gccaagaagg actacaccct ggccaagcac ccccaggttg atgccttgaa 180

cctcgaggtc atcaagctca tgcagagctt caagctcacg gagtccgtaa gggagacctt 240

ttctcggcag cactactact ggtacctgac caacgacggc attgagttcc ttcgcacctt 300

tctcaacctg cccgtctgag atcgtgccca acaccctgaa gaagtccagc aagcccccgt 360

cccgcccctt cggcttttgc ccaccgggtg accgccccaa gggtcctcc 409

<210> 3355
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075g06b1

<400> 3355

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tgtgcgagca gcccccaaag ttcgagtttt atgatcccaa aactcccttc ttcacctggc 120

ctcgatgctt gcctccaaca aagtcagaca agtgcaggat caaagaagcg ctcatttccc 180

acggctgctt cttgcgtgaa tgcaaaatcg agcacttcat catgggcgtt cgttcacgcc 240

taaacttcgg aagcgaactc aagaacgtaa tgatgatggg tgctgatacg tcgagaccga 300

ggatgagatc tcgtggctga tgtccgaggg taaggttccc tttggtgtcc gggagaacac 360

aaagatcagc tactgcctca ttcccatgaa cgcgaggatt ggaagggac 409

<210> 3356
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075h04b1

<400> 3356

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gaccaacctg gtgcggtacc ctcggatcca ctatatgctc tcgttctacg cgccggtcat 120

ctcggcggag aaggcgtacc acgagcagct gttggtgtcg gagatcacca acagggcgtt 180

cgagccgtcg tccatgatgg ccaagtgcga cccgcgccac ggcaagtaca tggggtgctg 240

actcatgtac cggggtgacg tgctgcccaa ggacgtgaac gccttggcgg ccatcatcaa 300

gatcaagagt accat 315

<210> 3357
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075h06b1

<400> 3357

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acctaatgtt aagttaggtg gacgctga 88

<210> 3358
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316075h12b1

<400> 3358

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ctcttgtgga ggagtctcat tgacgaaagt acgaactgat ttgcccgcct tccgctcgct 120

tgggtgaaac aacctgaact cgtgatgtca agtctgaccg gtgacgaaaa gaagaacttg 180

gcgccttccg tgtggcagat gctgtataga ggagctttga tgacacgacg gcctaagctt 240

gggca 245

<210> 3359
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076b01b1

<400> 3359

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caggttcacc gtgagggcgt cgcctgcgga ggcggaggcc tgcggccgcc gtgcggtcct 180

tggtctcatg gccagcggag tcgtcggcag cgcgttcgct caagtggtgc acgccggcac 240

cgtcggggac atcaaggatg ggccaccgac gacgctctgc ggtggactgc ccgtgacgga 300

caacttcgac gaggcaaggg acttcgacct gcccctgaag aaccggttct acctgcaggc 360

gctgccaccg gcggaggcgg cggtccgggc caagga 396

<210> 3360
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076b03b1

<400> 3360

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tttgatgaca gagaggctgt ggatcgggtg tcattcccag gagtgtcagt tgggcttgtc 120

tggacttctt ttggtgggga agttcagttt gtagaggctt cggtcatggc gggtaagggt 180

gacttgcata tgacaggaca tcttggtgat gtaattaagg aatcagcaca gttagctttg 240

acatgggtga gagcaagaac tgctgacctc aatctgggac ctacttctga tattaacata 300

ttggagagcc cgggatattc acatacattc ttcctgctgg tgctgagccg aa 352

<210> 3361

<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076c05b1

<400> 3361

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ttcatcgcct tgtggctcgt caagctgctc ctgtcccggg gctacgccgt ccacgccacg 180

ctccgtgacc cgagtgatcc gaagaacgcg catctgatgc agctggacgg cgcggcggag 240

agcctgagct tgttcaaggc cgacgtgctc gaccgcgccg cgctggtcgc cgccgtcgcg 300

ggttgccagg gcgtcttaca tgtcgcctcc cctgtgcccg cggagaagat cgtcgatcct 360

gagtcagaag tcatggtgcc tgccgtgaag ggcaccttac atattcttga agtctgttca 420

tctctgaagg ttccagaaag tgtggtggtg ccatacactg gtgccgtcat tatgatccca 480

actgggctta gggagagtac aggcttaatg ct 512

<210> 3362
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076c10b1

<400> 3362

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tatcctttaa gaaatcaacc ggtgagaagc cccagcggat aatattctac agggatggcg 120

ttagcgaggg ccagttttac caagttctgc tgtttgaact caatgcgatc cgaaaagcct 180

gtgcttccct ggaggcaaac taccagccac aggtgacttt catcgtggtt cagaaacgcc 240

accacacgag actatttgcg cacaatcaca atgataagaa ctcgatggac aggagtggaa 300

acatactccc aggtaccgtt gtggacacga agatctgtca tccgactgag tttgacttct 360

acttgtgcag ccatgctggc atcaagggca ccagccgtcc cgctcattat cacgtcttgt 420

gggacgaaaa caacttcaca gctgatgggt tgcagactct caccaacaac ctctgctaca 480

cctacgcgag gtgcactcgc tcggtgtcga tggttccacc tgcatactat gctca 535

<210> 3363
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076c12b1

<400> 3363

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aaaaaaaaaa aaaaaaataa agagaaaaag aacaaacaac tgaaggggggg gggggcttta 120

gaggaccaaa gtttacttgc ggggggaatg caagaccaaa gattttctaa agggccacct 180

aaattcaatt aatgggccgc tgatccaaaa acgtaggact gggaaaacca tgggaaaacc 240

aactaaatgg gttggaaaaa aataacattt tctcaaggag acgaaaaata aaaaaggccc 300

tgaccgatgg tctttaacaa cagtagtgca aacagaatgg cgaaaggcaa ccccattgta 360

tgggagcata aagccc 376

<210> 3364
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076e12b1

<400> 3364

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gtcctccggg agttccccgg cggggacagc gacgatgtgg tacccaacgc ggatgttctc 120

gccaaactga agctgctaca catggcattg ctcgagacat cgcgtctcta ccctccagtt 180

gtgtacatac aacggaaagc tgcctccgac accgtcctcg gaggcatcaa agtaccccag 240

ggaacaatca tatcaatccc cattggcatg ctacaccgag acaaggaagt ttggggcccc 300

gacgccaacg agttcaaccc catgaggttc gagcagggcg tcacaaaggc tgtcaaagac 360

tccaaggcgc tcttgacttt ctctctaggc ccgagagtgt gtactggtca gaactttggc 420

atcgtgcaag tgcaggttgt catggcaatg atcctcagca agttc 465

<210> 3365
<211> 461
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076f04b1

<400> 3365

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aagctgctac tgctgcacca agcagcctca acagagagtt tggatcaaaa ctcaaagagc 120

acatgcagta ctgtgtggac caccctgaag agataaacaa gcttgctaaa gtgcaagcac 180

aagtttcaga agtgaaaaac gtgatgatgg aaaacattga gaaggttctt gatcgtggtg 240

agaagattga gctgcttgtt gacaaaacag agaatctccg cttacaggcc caagatttca 300

ggcagcaagg aacacaggcg aggagaaaga tgtggctaca aaacatgaag accaagctga 360

tcgttctggg catcatcgtc gcgctcatcc tcatcataat tcctgccggt gtgccacgga 420

ttcaactgcg gcaagaagtg aggacaactc gaggtcgtga g 461

<210> 3366
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076f09b1

<400> 3366

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cttgttatgt gtgactgcta cacaccacaa ggtgtgccaa tccccaccaa caagaggcac 120

aatgccgcca agatcttcaa caccccaag gttgcagctg aggagacatg gtatggaatt 180

gagcaggagt acactctcct ccagaaggac gtgaactggc ctcttggctg gcccattggt 240

ggttaccctg gtcctcaggg accatactac tgcgccgccg gcgccgacaa ggtgttcggg 300

cgtgacatcg tggacgccca ctacaaggcg tgcctctacg ccgggatcaa catcagcggc 360

atcaacgggg aggtcatgcc cggccagtgg gagttccaag tcgggccgtc cgtcgggaac 420

gccggctcag accagctgtg ggtggcgtgc tacatcctcg agaggatcac ggtaggttgc 480

cg 482

<210> 3367
<211> 202
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076f11b1

<400> 3367

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gaggcccgtg aggatctcgc tgccctggag aaggactatg aagaagttgg tgctgagttc 120

gacgagggtg aggatggtga tgagggtgat gagaactact gcttctgtga ttgcgatctg 180

cagatctgcc cgagtggctt ta 202

<210> 3368
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076g07b1

<400> 3368

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cctggtggtg agctcaagca gacgctggat ctaggcagca caggtcttct tccgctggag 180

gtgaggtttt tacacgaccc atcaaaggac accggctatg ttggctgtgc tttgacaagc 240

aacatggtga gattcttcaa aactgcagat ggatcatgga gccatgaggt agctatatcc 300

atagaaccat tgaaggtgcg caactggatg ctgccagaaa tgccaggatt gataactgac 360

tctgtcatct ctctcgatga ccgctatctc tacttggtca actggcttca tggtgatatc 420

aggcagtaca acatttggga ccctgcaagc ctgtgttggt tggcaagttg ttgtaggtgg 480

gctttttaaa gggcatgatg tt 502

<210> 3369
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076h08b1

<400> 3369

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cctcgccgat tgtggcgccg acgagcgtcc cctccctctc ccgccggggt tcctccttcg 120

ccgtcgtctg cagcggtggc aagaagatca aggtcgacaa gcccccttgga cttggaggcg 180

gcttgacagt cgacatcgac gccaacggca ggaaggtggg caagaagggc gtgtaccagt 240

tcgttgacaa gtacggcgcc aacgtcgacg gctacagccc aatctacacg ccagaggaat 300

ggtctgaatc tggtgaccgc tacgccggcg gaacgaccgg gcttcttatc tgggccgtca 360

ccctcgccgg cctcctcggc ggcggcgtcc tcctcgtgta caacaccagc gctctcgccg 420

gctaagagag catctacgtg ttacaca 447

<210> 3370
<211> 522
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316076h09b1

<400> 3370

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agcagattct tcacctcgct cacaacacat tggaaataga gcggagggtc catgctgtga 180

ttgacaaatt tgcagagcgt ggacttcgat cgctggctgt agcgtatcag gaagtaccag 240

atgggaggaa agaaagccct ggtggcccat ggcactttgc tggtctgatg ccacttttg 300

atcctcctag acatgacagt gctgaaacaa tccggagggc acttaacctt ggtgttaatg 360

tcaagatgat cacaggtgat cagctcgcca ttggaaagga aacagggcgt cgcctgggaa 420

tgggtacaaa acatgtatcc ttcatttgct ctgttggggc agaaaaattc agacgagtcc 480

atttctgctt accagctgat gattcattgg aaagctgatg gt 522

<210> 3371
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077a09b1

<400> 3371

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aagggtcaga gatggcggac cgtgctaacc acccgtctgt catgcataag tttggtggac 120

agttccacct tgcctccagc ttctctgagg gtgttcgtgc tcgcaacatc tgcccttctg 180

tgccatccta tgagaggcgc ttcaccacaa gctgctacat gactcagaac cttggcatca 240

gtgtccccat gatgtcatct tcttcattgt ttgccaatgc accacctggg aagaaaggtg 300

tcaagaactt tgcaattgac ttgctatggg gggagtggcc gctgcagttt ccaagactgc 360

tgcagctcct att 373

<210> 3372
<211> 504
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077a12b1

<400> 3372

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cggcaggtct ggaatgttgc caatgtcgag ccctccagca aatccgggac agctcaccat 120

tttttatggt gggtcagtat gtgtgtatga ctcagtgcca ccagagaagg ctcaagcaat 180

catgctcatt gcagcagcag ctgctgcggc ctcaaaaagc aatggcaccg ctgctgttaa 240

gcctccagcg atgtctgcga ccaatgcgat ccaagccatg cttacgcggt cgctctcact 300

ccagagcact tctgtagcac atggacaacc tcaggctgtt gcggatccgg gctcgatttg 360

caagcttcag gctgatcttc ccatcgccag gagacactcc ctttagcgct tcctggagaa 420

gcgccgtgac agggtggtga gcaaagcttc ttacggcgcc gggtagccat ccgaaggcat 480

gtgagcattt tttgggatgg aagc 504

<210> 3373
<211> 197
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077b09b1

<400> 3373

ttttaaaaat tttaaaaaaa aaaaaaaaaa gagggtgatc agatataaaa gaacgatgat 60

tctgttgggt gcatgcgagg gctttgtttt cgtatagagg gttctatctt ggatcttctg 120

ggcgatggtt ttttatgtgg gggactgcat aaccaatgat gtgccgaaag tttatctcct 180

tgcggttggt gaacatc 197

<210> 3374
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077c04b1

<400> 3374

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aagagaagaa agaggctgac actgttgctc cggaggagaa gaaagaggcc gacactgttg 120

ctcaagaaga gaagaaagag gctgacactg ttgctcaaga agagaagaaa gatgcccctg 180

tcgttgatgc cccagagaag actgaagaag tggaaggcga ggcagctgaa tctgaggtag 240

ctccccggga ggctgagatg cctgaccctg taacggagaa caagggaaac gagaagccag 300

ctgaatttga agaagtcccg gtggagtttg agatgtctga 340

<210> 3375
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077e05b1

<400> 3375

tggaaagccc atgagttcat taaaagttca caggttcttg agaaccatcc taacagtgaa 60

gcttattacc gccataggtc aaaaggttca tggacacttt caacagcgga taacgggtgg 120

tctgtatcag attgtactgc agaagcactt aaggcattgt tgttgttgtc gaagatctct 180

cctaatcttg tgggggggtcc catgaaagga gaaaggttgc atgatgcagt cgattgctta 240

ctttctttta tgaataaaga tggcacattt tctacatatg agtgtaagag aactacatct 300

ctattagagg ttctcaaccc ttctgaaagt tttctgaaca ttattgtcga ttatccatct 360

gtcgaatgta catcatccgt gctttaggcc ttaattatgt tcaaagagct ttacccaggg 420

taccgcaaag aagagatagg aaaatgtatt aaaaatgctt ccaagttcat tgaggacaag 480

caaagaaagg atggctcatg gtttg 505

<210> 3376
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316077e06b1

<400> 3376

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cccgagaggc ccatctggtt ccccgggagc accccatcct tcgtggcttg acggcagtcg 120

tttccggaga cttcgagttt gacccctggg gtgtaggatc cgacccggag agcttgcggt 180

ggaacgtgca ggcggagctg gtgcactgac ggtgggcgat gctgggcgcg gcgggcattt 240

tcatcccgga gcttctgacc aagatcggca tccttaacac gccgttgcgg tacaccgtcg 300

gtgagcatga gtacttaacc gacaccacca ccccttttaat aggggagctt attcccatcg 360

gctgtgccga gggccgccgg tgggcaaaca ttaacaagcc cggctgcgta acaaggaccc 420

catttttcca acacaagctt accgcaccga cgttggtccc 460

<210> 3377
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316077e09b1

<400> 3377

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ctgcggaagt tcatacccac tagatgggga aggcaaagcg tgcatcgata tttatcaggc 120

tcgtttcagc agctggaact ggtttttttct acgtgaagcg taagaatcct cggcggatta 180

cagagaagct tgagttcagg aagtacgatc ctcgtgtaaa caagcatgtt ctatttacgg 240

aagccaagat gaagtgagac agtgcagcct ttttttttttt ttcttgacat aagacctgta 300

ctgttcattt tcgctgaaga cactgctacc tttattagcc tgttccagat tcgagagttt 360

catgtgggca ccaaatcagc atggatcttg ctctgcctgc gctgttattt gtattgtaag 420

tttatcactg aaaagagctg caagcctgga aaagtatgcc catctagtgt tgtgacaaaa 480

tagagcggtt ttt 493

<210> 3378
<211> 457
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316077e11b1

<400> 3378

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ccacctcaag ctcgtttacc tgaccctatg ctttgccctg gcctcatctg ccgtgggtgc 180

ttacctgcac attgccctga acattggcgg gatgctgaca atgctcgcgt gtatcggaac 240

catcgcctgg atgttctcgg tgccagtcta tgaggagagg aagaggtttt gggctgctga 300

tgggtgcagc cctcctggaa ggggcttcag ctggacctct gattgagctt gccatagact 360

ntgacccaag catcctcgtg acagggtttg tcggaaccgc catcgccttc gggtgcttct 420

ctggcgccgc catcatcgtc aagcgcaggg agtacct 457

<210> 3379
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077f07b1

<400> 3379

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ggcactacag acattacaag aactgtacat tttggtaaac cctcagagca tcagaaatcg 120

tgctacacag ctgtcttgaa aggccacatt gccctagatg ctgctgtgtt tcctaatggg 180

accacaggtc atgctcttga catactggca agaaccccac tgtggaaaag tggtcttgac 240

tatcggcatg gcacaggcca tggaatcgga tcttatttga atgtccatga aggccctcat 300

ctaattagct tcagaccttc tgctcgcaat gtaccactgc aagcatcaat gactgtaaca 360

gatgagcctg gttactacga agatggaaac tttggtataa ggttggagaa tgttcttata 420

gtcaaagagg ctgatactaa atttaatttt gggga 455

<210> 3380
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077f08b1

<400> 3380

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gcctgctcgc ggtcaagacg acggccgcca agaccgccga gaaggacaag gggaagaagg 180

cccccatctc ccgctcgtcc cgcgcggggc ttgagttccc tgtgggccgt atccatcgtc 240

agctgaagca aaggactcag gccaatggcc gggttggtgc tactgcggcg gtctactctg 300

ctgctttcct ggagtacctg acagctgagg ttctggagct tgctgggaac gccagcaagg 360

atctcaaggt caagcgtatc acccccttgtt acctccaact 400

<210> 3381
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077g01b1

<400> 3381

aggcctgagc cctgctggga tgcggacgca tcagcgcgaa gtgccttata cgcctttcgc 60

ccgcttcctt ttttaacttt tatgacca 88

<210> 3382
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077h02b1

<400> 3382

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ctcgtggcgg tggccgtgct cggtcaaggt catactcttc tgctccaaga cggcgagatg 120

actactctgc ttccccacgg ggaagggagt ctcatcgcac gaaatctcct gtgcgtcatc 180

caaaagaaca tgaggaggac aaaaggagat cctactctcc ccctggtaga gatggtgacc 240

aacgtgatgc tgataacggg aggtcgccac cggccgacag tgatggatcc ccttcacgcc 300

cgagggtggc caggccatcc tcaggatcgc cccctggatc ccgctccagg tcccccgacg 360

cttctcctgc ccgcagcgac tgagaaattg gttacattct ctgcgggcgc cgcatcttca 420

tttagctact tccat 435

<210> 3383
<211> 579
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316077h09b1

<400> 3383

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aaaacaccat taaccaacta atagtgtctt tggcgcaaag ttaatacgcc atgaggacaa 120

ccagcatcct cattgtcgtt gttgccatgg tcatgtatgc taccagcgca tcggccacgc 180

gttgtggaga tttgatggga catcaattgt ggcacacgac agtagaggat ggatgggagc 240

caatcgtgaa cataaatgat gaccacatcc aggagctcgg tgactgggca gtgttggagt 300

tcaacaagca tgtgaactgc acagtcaagt tcaacaaggt gttgagcggc cgacaaaaac 360

atgtgtctgg catgaactac gagctcatta tcgacgtgac acactntggt ggngaagacg 420

gtaactacaa ggcggagctg tacgagcagg agttgacgaa aaaacgccag ctcctttcct 480

ttaccaaagt gaaataggcg gcaccagtga tttaattgca ttatttggtt cctggaatgg 540

tgttagttcg ttgttaatcc aataataatt ttcccttgg 579

<210> 3384
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316077h10b1

<400> 3384

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cgtatgctat gttatggata gctcctgtcg caacaacatg acgagagatc ggagcttctg 120

ttcccccaaa aatgtgagat ggagaacctt actagcgagc ggccggtcgg gcggctacgt 180

tatgtgcctg agcagctgac acctgcaaag agctctcttt ttagaccaga cgacctgtgg 240

cgatgctagc cgaggccgga aacaacgact acatacttgc atcgctacga gctgagcctt 300

gacgttcttg acatcatgga ggacagcata aggcccaaga tgtgcccgcg cagatgcctt 360

gcttgcatgc gcatatcgcc aggacctgcc ctttcaacat gatgat 406

<210> 3385
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316078c03b1

<400> 3385

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tgctcatcgc tagggcgcgg gctcccgttt caagtcacac acccaccacc ataagggccc 120

cggccgtttg atgtcgttcg acttcggcca tcgcaacaga tacactaagg gcgctcctac 180

cgttgttatg caaacacctg agcctggttc gccgcttgac aagg 224

<210> 3386
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316078f03b1

<400> 3386

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tcaccaagta tatgtcaata catgtctcaa tggcatggct ttgggatcga gatctacctt 180

gctaacgtta cagatcaatt gtcaatagct tgttgaaaat ctccccttgt ttgtaatgta 240

aggatcttat gtaatcttaa ggtttgcagc taatagagaa acccaatcca agtaaaagtt 300

ttcaacccaa tccaagtaaa agttttcagt attgcttaat tgtgtgagtg attaacactt 360

tttggttgtg ctgaatttca ctcctacata gttttattga caatttttat attcctttca 420

ttcaaatgag gcacaagata gatcacatct atcgcaacgt attggag 467

<210> 3387
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316078h02b1

<400> 3387

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tatttgacaa gatcatcaaa aaggagatac cttctacagt ggtgtatgag gatgagaagg 120

tcctcgcttt cagagacata aatcctcaag ctccgaccca cattgtaatc attcccaaag 180

tcaaggatgg attaaccggc ctttcaaagg cagaagagag gcatgtagag atacttggct 240

gtctcctcta cgctgcaaaa gttatcgcaa agcaggaagg acttgaagat ggctaccgta 300

ttgtcatcaa tgatggccct agtggatgtc aatctgttta ccacattcat gttcatcttc 360

ttggagggag gcagatgaac tggcccccag gcta 394

<210> 3388
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316079a10b1

<400> 3388

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cacgggccca aagacagaat gtaccagggc ggtcagtgga aggtgagggg tgacctcaca 120

gaacactgac tccttacgaa gagcagttcc attggcttca acaaacagat cgatcaccta 180

aatgtggttg agaaagaccg gaacggctgt ttggatgtga ccaacccgac ctggaaccca 240

atgttccgcc ttgtgaatat ttttgaggag ttccgggacc agattgttct ttactggaac 300

cgctcggact cttacgaacg gggaggctgg gtaaactcat gatgcgcgac acgaatgcct 360

attgaaaaac agtcaaagaa tattgggaga gataagccca gcctggacac atattcctcg 420

gactaagaag aagatgagga ggatgaaag 449

<210> 3389
<211> 439
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316079b10b1

<400> 3389

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cggccacggc ccagaactcg ccgcaggact tcgtggaccc ccacaacgcg gcgcgcgccg 180

acgtcggtgt ccggccggtg acctgggacg acaacgtggc cgcgtacgcg cagaactacg 240

ctgagcagcg ccgcggcgac tgccagctga tacatactcc cgatggccgg ccgtacgggg 300

agaacctctt cggaggcggt gggacccaga ggacggcggc ggacgccgta gagctcgtgg 360

gtgtcggaga agcagtacta cgaccacggc agaaatagct gctccgcccc ggagggcgac 420

tcgagcgggc actacacac 439

<210> 3390
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316079g08b1

<400> 3390

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ttttgatcac cggtgatctg gtgcgatagg tcaccatgat gcagccaaca acgctggggc 120

ttctgggtca gcaggaaaag aaccagtcac gcgcaagcgg gtgtcaacat ggcatggcgc 180

agcgcgagca caatctggag gagaccacat gagctgagga cgactgagat gacgctttgc 240

gctcaacagg gtgaagcatt tgcagcgaga tggacacccg aaagctatga aagaacagct 300

ggttgtccgg gtcggactgc acgaagacga gttcgatgac atgatgttct aatactgggc 360

agtggccggt ggaccacaag cggttgactg gcaaagccct ggccggacga agttaagctc 420

<210> 3391
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316079h07b1

<400> 3391

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cgaggcggca aggcgccggt gccggctaag aagaaggcgg tggacaaggt tgcgaacccg 120

ctgtttgaga agaggccgaa gcagttcggc attggcgggg cgctgccgcc caagaaggac 180

ctccaccggt tcgtcaagtg gcccaaggtc gtgcgcatcc agcgccagcg ccgtatcctc 240

aagcagtgcc tcaaggtttc ctcggcgctt caccagttta cccgcaccct cgacaagaac 300

ctcgccacca acctgtttaa gatgtcttat aagtaccgcc ccgtggacaa ggtggctaag 360

aaggagaggc ttttgatgag ggcccaggct gtagctgagg ggaaaacccg ttgaggccca 420

ta 422

<210> 3392
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316079h11b1

<400> 3392

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cgaatgaggg gaagaccggt cgtgttgtgt catttgtttg ctgggaactc ttcgacgagc 120

agtcatatga gtacaaggag agcgtgctcc ctgaggccgt caccgcaagg atcatcattg 180

aggctggctc tacccttgga tggcaaaagt atgtcggatc caagggcaag accatcggca 240

ttgacaagtt cggagccagc gctcccgccc cgaagatcta caaggagtac ggcatcaccg 300

cggagaacgt catcgccgca gccaagagcc tgttagatca gcacactcgt tgaggttctg 360

tcatcgttga tgccaaagaa caaacgacac cacacttgaa ggtctcgtgc ccagaagctt 420

ggaataacgg agggagagga ggatttgcct gagcgcgagt ggtttttta gg 472

<210> 3393
<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080a04b1

<400> 3393

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atgggcaatc gggatgtcgc acctgaggtc tacttcagat cccgagatct ggaagaaggg 120

cccggcattc tgaatgcctg gggtacacgt cgatgggatg gacgtcctga aggccatgga 180

ggtggctaaa gaggcaactg acagggcaag gagaggtgaa ggaccaactc tagtggagtg 240

tgaaacttac cggttcagag gacactctct tgctgatcca gatgaactca ggaggcctga 300

tgagaaatct cactacgctg caagggaccc catcacatcc ttgaagaagt acattatcga 360

gca 363

<210> 3394
<211> 345
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080b03b1

<400> 3394

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actggttttt caccaccgac ccggcgcgtg gggagaccac gatgtatcaa gcaccaccgc 120

tgctgctggt ggcccaccct gaggagttgg tgcgccaaca aggggtgtca tgagtggccc 180

tgcgccgcca gttgcttctg tgtggaggac atcacgacag atgaactgct ggtcgccctc 240

ctcccgttgg tgggacaaca actccaccgt gatggcctgc cggcggcgac aaaagaacaa 300

ctgccgctcc gggcggcaca gctgaaagag gtggttgacg ccacg 345

<210> 3395
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080b06b1

<400> 3395

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atggcgatga agcaggagca ggccaagctg gccgcctcct cttttgacag catcgtcaac 180

ggtggtgatg ccgcgaaaga acatcttgct gctggcaaca cggcggtggc agttgctcac 240

gtagaggcga agacgcttat taccgcacag cctgctgata tcgccggtcc cagcgaggcg 300

gcgatggaaa accccaaagg cccaagccgg tgcagcacct gcagaaagag ggtcgggctg 360

accggattca actgccggtg cgggaacctc tactgcgcga cgcaccgtta ctcggacaag 420

catgagtgca agtttgacta ccgcgccgcg gccatggacg ccatcgtcaa tgccaacccc 480

gtggtga 487

<210> 3396
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080b07b1

<400> 3396

aaaaccaagc tcaaaataaa aaaaaaaata tacctaaaaa aaaaacgaat ttttaaaaac 60

aagaaaacac aaga 74

<210> 3397
<211> 164
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080c04b1

<400> 3397

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gaacaactgt accgagatgg cagtctgacg gagacgaaag aacaactggc gcttcccgtg 120

gcagagctaa acgaggtggt tgatgacacg cggcctatgc ttgg 164

<210> 3398
<211> 509
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080f08b1

<400> 3398

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ttatagggag ggacttatgt caccacaaac agaaactaaa gcaggtgttg gatttaaagc 120

tggtgttaaa gattataaat tgacttacta caccccagag tatgaaacta aggatactga 180

tatcttggca gcattccgag taagtcctca gcctggggtt ccgcccgaag aagcaggggc 240

tgcagtagct gccgaatctt ctactggtac atggacaact gtttggactg atggacttac 300

cagtcttgat cgttacaaag gacgatgcta tcacatcgag cctgttgctg gggaagacag 360

ccaatggatc tgttatgtag cttatccatt agacctattt gaagagggtt ccgtttctaa 420

catgtttact tccattgtat gtaacgtatt tggtttcaaa gccctacgtg ctctacgttt 480

ggggatctac gaattccccc tacttattc 509

<210> 3399
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080f09b1

<400> 3399

acaaacaccg cgaaggcaac aacgccccag accgacaccc gaaaaaccag gtgaccaccg 60

acgagccgac gcgagagaac accaggagcc acacagcacc gccgacgcca gcagcaaacc 120

cagaagagaa cgcgcccgca caacccggaa aaaaaaaagg ccccccggag ccaccagcac 180

ccgaggagga gcccacgaca aaagaagaac cgaccgcccg cccccgacca ccgggcgaac 240

aacagaaccg cgaaggcagc ccgacgggga cgaaagaaga acaggcgcgc cccgaggcag 300

aactaaaaga ggaacgagaa gacaca 326

<210> 3400
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080g01b1

<400> 3400

tcgtttaggc aggaggagga ggagagcgag gacgaaaatg gtgtcgctga agctgtagaa 60

gcgcctggcc tcgagcgtgc tcaagtgtgg caaggacagg gtctagctcg acccctatga 120

ggtcaacgag atctccatgg acatctccat ggagaacatc cggaagctga taaaggatgg 180

tttcatgatc aggaagcctc acaagatcca ctacaggact cacgcaagga gggcacatga 240

ggccaagcat aagggccgtc actctggata tggctagcga tatggtacca gggaggctac 300

gatccacacc aagatcctga gcatgctgat gatgctcgtc ctgatgctcc ttctgcggaa 360

gttccgtgag gcgcacaaga tcgacaagca catgtaccat gacatgtac 409

<210> 3401
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316080g06b1

<400> 3401

attaattaaa aaaaattttt ttaaaaaaaa aaaaaggaaa aagaaaaagg gggggaatat 60

aaaagaaaaa ataatggaca aaaaataata aattaaatat aaaaaaagaa aaagaaaaag 120

aataaaaaaa gaagaaaaga aagaagaaaa agaaaaagaa ataaagaaaa aaaataagaa 180

gaaaaaaaaa gaaaaaaaaa aaggtagaag aacaaataaa agagaaaaat gaaaagaaaa 240

acacataaaa aaaaaaaaaa aaaaaaatgg agaagaacaa aaaaaaaaaa aagagtaaga 300

gaaaaaaaaa aaaaaaaaaa aaaaagaaac aaaaataaca aaaaaaaaaa gaaagaaagg 360

taaaaaaaaa aaagagacaa gaaaaaaacg acacgacaag aaaaaaatag aacgaacaaa 420

aacaaaaaga agcaaaaagc atcaaggaga aaaaaaaaaa aaaagaaaac a 471

<210> 3402
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316081a09b1

<400> 3402

ccgggggggag tctggtcgta agggttaaac ttaaaaaaat ctgccgaaac ccctggggag 60

ggacactaca gaggacgcct gccaacattt tctgcattat gaaggctata cagcacttaa 120

acgtgtttga caagcctctc gaccaaggaa gacctgatgg cccttccgag tgtttttgca 180

tgactgttct agccattgtt tcaatactac cagacacaat ttaacaacat ctgcttcctg 240

tgacgacgtt aaggaccctg gtttgctgtg gtccaagatt tcttgtactg ctttgtttac 300

aagtgattgg gtataaacac gctactctac tgctggtgat tttattattc atccacatca 360

cctttggtaa gtcctgtttg aaaggtgggc ttgcttcgtt tg 402

<210> 3403
<211> 444
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316081c09b1

<400> 3403

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accggcacga gagaaaacga cagaacaaac agaccgaaga agccgatgac agacccagaa 120

gagaacgaga caaacaacag gcgaaaccaa ggcccaacgg agccaaagca cacagggagg 180

agccaagaca aagagaactg atgcccccac gcacgagagg aaaaagaacc ggagacaaac 240

gaaagacaaa aaaacagcac aacgcgggac aaaacagaaa gagaaacaaa gaaaacacga 300

ggacaaaaca aaggaacagg acagaagaaa aacaaacgcc aatgaacagg gaaaaacccc 360

aggcaacaac ccaaaaaaaa aacaccaaag caagcaacaa caccccccaca acgcacaaca 420

gggacgcaaa aaacaaaaaa ggac 444

<210> 3404
<211> 653
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316081c11b1

<400> 3404

ttttatttt ttttttattt tttttttaca attttttttt accaaaaatc acaattaggt 60

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ttttttttt ttttttttat ttttttttt ttttttttt ttttttttta ttttttttt 180

ttttttttc atattttttt ttttattttt tatttttttt tttacttttt ttatcttatt 240

tattctttat cttattatat ttaaattatt atttatttac atttttaatt tatttttat 300

tatttatatt tttttattat ttataatttt ttactttctt tatttatttc atctaaattt 360

tttattatta taattcttat atatatttat tttttattat tttttctatt atttatgata 420

tattattatc atttattctt atatttttta tttatctttt ttttattata ttttttatat 480

atctttattt cttattattt ttatttttta aatttaattt tttttctttt tatttatctt 540

tatttttat ttttttattt atttttttt tttttttatt ttttaattta ttttttttt 600

tttttttta ttattttta tttttatatt attatttttt ttttttctta tta 653

<210> 3405
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316082d03b1

<400> 3405

aaaaaaaaga aaatgaaaaa aaaaaaaaaa aaaaaaaaaa aagaagaaag ggaaaaaaaa 60

aagaaagaaa aaaaaaaaaa aaaaaaggaa aaaaaaaaaa aaacataaac aaaaataaaa 120

aaaaaaaaaa agaaaaaaga taaagaaaaa aaaaaaaaaa aagaaaaaga aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaca aaaaaaacaa aaacaaaaaa aaacaaaaaa agaagaaaaa 240

aaaaaaaagag aaaaacaaaa acaaaaaaaa taaaaataaa ggagaagaaa aaaaagaaga 300

aataaaaaaa aaaacaatat aaaagaaaag atagataaaa aagaagaaaa aagggacaaa 360

acaaataaaa aaaaaaagtg aaaaataaga gaaaaagaac atatacaag 409

<210> 3406
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316083a03b1

<400> 3406

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gaagcagcaa gaagaagatg gccggaagga agggcggcga caggaagaag gcggtgaccc 120

gctccgtcaa ggccgggctg cagttccccg tcggccgcat cgggcgctac ctcaagaagg 180

gccgctacgc ccagcgcgtc ggctccggcg cccccgtcta cctcgccgac gtcctcgagt 240

acctcgccgc cgaggtcctg gagcttgccg gcaacgcggc caaggacaac aagaagacgc 300

gcatcatccc gcgccacctg ctgctggccg tccgcaacga ccaggagctc ggtaggctgc 360

tcgccggcgt caccatcgcc cac 383

<210> 3407
<211> 68
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316083a05b1

<400> 3407

cagctatgga ggcggacgca cacccggag gcatcaacgc ctgtgtccgc ggcgcgataa 60

acgggctg 68

<210> 3408
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316083c02b1

<400> 3408

acggtgtttg tgcacccggc attctatgag ggtgttgacc atacctcaat aaaggccatt 60

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gggggcacg gctactatat ggaggactta cacagaatga cgaggaactg agtgtgcttg 180

tggacttgtt tggtaagcaa cagaaacacg atgtccactg gaacaagacc taagaaggag 240

tgcttcttcg catggaggag aagtacaccg ggctgctgta ctctaagagg ctgattacca 300

cttgtcgtgt ctatagaacc tggaagcatg gatacaacct ggacaggcgc aagaaatgtc 360

gctaccttga aatgctctat gccctgaagt acctgaaaat ggataggact gtcccattgg 420

ctgttgagag cgagacccca gccaaatgag ttatgcttac cagag 465

<210> 3409
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316083d02b1

<400> 3409

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tttactgcat atctgctggg ggtgaagagg atatgcgaga tacacctcaa ctgtactgcc 180

ttggtatagt cttactggcg ttagatgtgt tctttggtgt tttctgctgt cactatggct 240

tgcattattg ctattgacgt ttgttgctgc ctcccttgca ttatagcaat tatgtctgct 300

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cgtcagatgg atggacctga aaaggattcc gatgatgcca ctgagtcttc t 411

<210> 3410
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316083d05b1

<400> 3410

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ctttccaccg gccgtcgcgc gagtgagcca tgcatgagtc agccacgacc gtgctggctg 120

ctggctgacc ctagtgagag tgcgtacgac caactggagc aatgatgggc ctgggcagac 180

attgtttgtg tgtggaggaa tccatgacga aagaataact gattggccgc cttcgctggg 240

tgagagaaca accgcaccgg gatgtctgac tgacagggac gaaagacgaa ctgctcctgc 300

gagtggcctg atgagagagg tgattg 326

<210> 3411
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316083e09b1

<400> 3411

atattattaa ttatttaata aatcattatc ttataataaa tttataataa ttaat 55

<210> 3412
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316083g06b1

<400> 3412

aaatacagaa aatataaaaa taaaataata gtataataat aaaaaaaata aaaataaaaa 60

ttataaatat aaataatata aaa 83

<210> 3413
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316083h02b1

<400> 3413

gtacaagggc aacaagggta ctacccaact tctctccagc agccaggaca agggcaacaa 60

gggcactacc cagcttctct gcagcagcca ggacaaggac agccaggaca aaggcaacaa 120

ccaggacaag ggcaacatcc agaacaaggg aaacaaccag gacaagggca acaagggtac 180

tatccaactt ctccacagca gccaggacaa gggcaacaac taggacaagg gcaacaaggg 240

tactacccaa cttctccgca gcagccagga caagggcaac aaccaggaca agggcaacaa 300

gggcactgcc caacgtcccc gcagcagtca ggacaagcgc aacaaccagg acaaggccaa 360

caaataggac aagtgcaaca accaggacaa gggcaacaag ggtactaccc aacttctgtg 420

cagcagcctg gacaagggca acaatcaaga caagggcaac agtcaggaca aggacaccaa 480

ccaagacaa 489

<210> 3414
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316084c07b1

<400> 3414

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ctcaccacga cggtcgtcac cgtcttccgc atccgccgct tcggccccca tttcctccgc 180

acccaagggc acgcgcatcc ccacctcaac caccatcacc accacctaca ctccatcccc 240

gccaacatcc agatccgccg ccccgagctc ccagagcttc cccactctgc gaccggcgtt 300

gccgtgagca tccaggagcg cgtcaaggac atcctggtgg tcctcgtcgg gatcctcttc 360

ggtatcggct gcggcgcgct caccgctgcc tccatgtacc tcatttggtc cgtaatcgcc 420

ggccccggcg cgtccttcca ctacgacgag ctctacggcg acgaggcgtt cgactccgag 480

agccccaa 488

<210> 3415
<211> 535
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316084d08b1

<400> 3415

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ccgcgtggcc ctggcgcccg cggccctcag cctcgccgcc gccaagcagg tgcggggagc 180

caggctccgc gcgcaggcga cgtacaaggt gaagctggtg acgcccgagg gcgaggtgga 240

gctggaggtc cccgacgacg tctacatcct cgaccaggcc gaggaggagg ggatcgacct 300

gccctactcc tgccgcgccg gctcctgctc ctcctgcgcc ggcaagttgg tgtccggcga 360

gatcgaccag tccgaccaga gcttcctcga cgacgaccag atggaggccg ggtgggtgct 420

cacctgccac gcctacccca agtccgacat cgtcatcgag acccacaagg aggaggagct 480

caccgcataa gctgctatac ctatctctct ttgcacgaga tcgagctgat atcat 535

<210> 3416
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316085g02b1

<400> 3416

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ctgtcaaccg tgtaactgtc aactttggtg tgcacattgt tgttttgtaa catgtcttac 120

atatattctc tctatacata caaggaaagc gtttccctcc tgtaaaaaag aaatagtgag 180

ttgaactgtg acgcaaacaa gatgatagac tgacaag 217

<210> 3417
<211> 71
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316086b01b1

<400> 3417

aaaaaaagaa aaaagaaaat taataaaaaa aaaataaaaa aagaagggaa ataaaaaaat 60

gaaaaaaaat a 71

<210> 3418
<211> 720
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316086b10b1

<400> 3418

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aaggggggagg gagggagagg gaggggatgg agggggagag gagaggggggg gggggagagg 120

aggcgggggg ggggaggggg gcgggagagg gggaggaggg gggggggggg agagaggggg 180

ggaggggggga gcgcagaagg gaggaggggg ggagggaggg agaggggggg gggggggggg 240

gggaaagggg ggagaggggg gaaggggggaa gggaagaggg ggagggaaca gaggaggggg 300

agggggggggg gggaggggggg acgggggngg gggggggcag ggggaggcga gggggggggag 360

gggggggggg gaggggaggg gaggggggag ggaggggggg gaggggggggg gggggagagg 420

atgggggggg gaggaggggg agggggggggc gggggggagga gggggggggtg gggggggggag 480

gggagggcgg ggggaagggg ggggagaggg gggagatggg gcgtgggggga gggaggggga 540

gggggggggg gggggacatg gggggggggg agcgggggtg ggggaagggg gggggggaga 600

ggggcggagg gggggggggg gaagaggggg tgggggaggg ggggaagaag gggcgagggg 660

gggggggaggg ggggaggggg agggggggga ggaggggggg ggagggaggg gggggggggg 720

<210> 3419
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316086c03b1

<400> 3419

tcgagtataa cctggagagg atcatggtcg gcgtgaacac cagtgtggac ggcctcaagc 60

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cggccaagga ccggtggtcg gggcttctcg gcctgggggg cgcttttggc gtcacggccg 180

tctgcggcgg gtcggccagg gcaagcgtct tcgacgagta cctcgagaag agcaagctca 240

actaggagct gaacgacaag aagagggcgg tgacgagcgg aggcaacttc ttgcgcgcct 300

acaccgttca gctcggcagc tgctagttac cctacaactt caccggatgt caggaccttt 360

gcaagcataa gaaagttccg ctcatcaccg acgacctgga gatcgagtgc gaggggaagg 420

agaagctcaa gtgcggatcc aac 443

<210> 3420
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316086c06b1

<400> 3420

tcgattttgc caatccctta tggaatgacg tactggagct ccctgtcaca aatgctacaa 60

agtcagtgat aacttgatca agacgatcta cccgcatggc acaaactacc ttggcggtga 120

gagccacgta tcgtggaaga gtggcacggt cctccaggac tagattctga agctgtagaa 180

tgtggacagt ggctctgtgg cgctacatct ggaatgggct cacgcccctg gtgttaccct 240

gctaggtgcg cccgactgaa tggaggtgca acgctgctcg atgactctgc atgtatcggt 300

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<210> 3421
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316086e06b1

<400> 3421

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gcgaagccaa accaacagaa acaggaccgc ccgcctaagc cccagcactc aagggaagca 120

aaccaaggca acagcagaag cc 142

<210> 3422
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087a02b1

<400> 3422

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acgcatttgc ccgtcacccg aaaaactggt gtaccacctt ttcaaccggc gcgagagttc 120

accaggattc agacagtacc gacgatgctg gtggctgacc ctgaagagtt cgtggccgga 180

caactggcat atactcatgg atccttggcc cccatgggcc attctgagga gggggttagt 240

gacccaagac gaaacggaga gcccgacgtc cggtctctgg gcgaagaact gaacaccttg 300

aagcgcagcc agacggggta cgaaagaaga acgtgggg 338

<210> 3423
<211> 149
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087a03b1

<400> 3423

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tccacacctt cagatctgtg gcctgttgta gtctctgcct ccttcgtaac tacaagtccc 120

tgcattcctc tccttgatcg gatgtacac 149

<210> 3424
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087c11b1

<400> 3424

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gt 62

<210> 3425
<211> 655
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087d09b1

<400> 3425

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aaggaaaaaa aaaaaagagg aaaaaagaaa aagaaaaaaa gaaaaaaaaa aaagaaaaaa 120

aaagaaagag gaggaaaaag aaaagaaaaa agaaaaaaga agaaaagaaa gaaaaaaaaa 180

aaaaaagaaa aaaaaaaaag aaagaggaaa aaaaaaaaaa agaaagaaga aaagagaaaa 240

aagaaagaaa aaaaagaaag aaaaagaaaa gaagagaaaa aaaaaaagaa gagggaaaaa 300

aaagaagaaa agaaaagaga aaaaagaaat aaaaaaagaa gaaaaagtaa aaaagaaaaa 360

aagaagagga aaaaagaaaa gaagagaaaa agaaaagaaa aaaagaaagg agaaaaaagg 420

aaaaaaaaaa taaaaaaaag aagaaataaa agaaaaaaag aaagaaggaa gaaaaaaaag 480

aaagaaaaga aaaaaaaaaa ggaaaagaaa ggaaaaaaaa aaaaaaaaaa agagagaaga 540

aaaaagaaga aaaaaagaaa gagaaataaa aaagaaaaaa acagaagata aaaaaaaaaa 600

aaagaagaaa aaaagaaaaa ggaaaacaaa aagaaaaaaa aagaaaaaag gggaa 655

<210> 3426
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087f06b1

<400> 3426

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ggcgcagagc catctatgtg gaagcgtaca tgaaaagcga tgaacttgat aacaaaattc 180

tgatcatggg aaaacaagtg aactgaaaga agagctaagt ctccgaaaaa ttgaagaatt 240

gatacaatgc tggaaactga ccaagccagg agggtgttaa cggtactcca caactaggac 300

ctggtcaggg agatcaatct tcgcgactgg taaaacacca cccttgcccg agctgacctt 360

gtttg 365

<210> 3427
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087g04b1

<400> 3427

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tctcgctggc cgtggaggga gccgagcccg aaccatgaac actaggggct tcctggagcc 120

tcagaagtga ttttttttgat ggcattgagc acagagagat acgatcatca gctgattgtt 180

tacatgagat agatgaacat cataatgagc gagctatgga tggaatgcaa gatctagtcc 240

ttattctcaa gaggataaca ggtgatatag atgactcggg ggctgatcat taccttggc 300

tgtacacaat ggggaatgac ctggaacatc aaggggttc ctatttggaa cagtggactc 360

attcaagac 369

<210> 3428
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316087h06b1

<400> 3428

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gactgtgcag gtcggccaga aggggatccc ctacctgaac acctatgatt gacggaccat 120

tcgctaccca gaccctctat gaaggccaac agacactata aagcatacga gctggagacc 180

aacaagattg tggactaact aaagaaccac gatggtaacc tgaccatgac gactgacgaa 240

ctcaacactg ggcgtgtaga tgtgatcaag aacctggaga accctagggc aacctttgag 300

accatccacg ttgaggcagc ccagggacag caaaaaccca cccgtttggg caatgaattc 360

accattggca caggcacc 378

<210> 3429

<211> 546
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104b08b1

<400> 3429

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ctgccccctt caagcagagg tacctgactc attatggagt cgaaatcggt aggaagaaga 120

aagctgctgc agctgccaag aaggaacctg ctgaggggca agaggctgag gttgctgctg 180

ctgccacaga ggaagcaaag aagagcaaca atgtccagag gaagcttgag aagcgccagc 240

agggacgtac actggactcg cacattgagg agcagttcag tggtggaagg ctgctggcct 300

gcatttcgtc tcgccctgga cagtgtggca gagctgatgg gtacatcctg gagggcaagg 360

agctggagtt ttacatgagg aagctccaga agaagaaggg caagggtgcc acagcttacg 420

ctgaagagct gctgcatgtt actcgttgga ttttcttaga tgttgcgtcc atgtcatgtt 480

tgcagacata ctgaacacca ttttctgtaa acggttcgag ttctaggttg aactgagaat 540

gttttg 546

<210> 3430
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104c10b1

<400> 3430

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ttgattgacg cgaatacttg atgttcagac caaacacact ataaagaggg aggaagtttc 120

atgccaaatt gttggagtga ctgcaggact acttgaatta ccagagatgt tgctatcatt 180

gatgtgaaaa caggtaagaa acgccggagg aagtataaag gaacttgagg agagaagact 240

aagaggaaga gccgtaaaca agcagctgag gctcacaaag acaatgatga tgaatatgat 300

gctggtcatg ctggttctga ggacacatca atgggagaac gcgattagga ctctgaagtg 360

aacgaagaaa ccaagagtga tgaagagcct gaagcgacac cagttaagaa aaagttaaca 420

gatgattaac aaggcatgat ggaagctgga t 451

<210> 3431
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104e09b1

<400> 3431

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ggatttttat gcaattttat tctgactctt ttctcccacc aatctctctg gcttgctgct 120

tcacgataat cgaccagttc tctagtcttt ctcccctctgt tcctctctgc tctgctctct 180

gactcgaact gcaacaatgg ctgccccgac ctctgcgatc gggtttgagg gctacgagaa 240

gcgcctcgag atcaccttct ccgaggcatc aatctttgcc gaccctcatg gtcgtggcct 300

gcgcgccctc tccagggccc agattgactc tgttcttgat cttgcacggt gcaccattgt 360

gtccgagctt tccaacaagg acttcgactc ctatgtgcta tctgagtcga gcctgttcat 420

ctactctcag aagattgtga tcaagacctg tgggactacc atgctcctgc tcaccattcc 480

taggatt 487

<210> 3432
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104f09b1

<400> 3432

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ctggcctcat catggaccaa cggggccatc gcctttctga tcaagtgtac ataacccaag 180

atcaactaga tcgtcgacat cgctcgcttc gagaacaact taaccgagac atcaagctca 240

ccgggaccaa agaagaactg cctctccacg tgcgaaacct gaaacaggac atgaacgacg 300

ccacgcctac cttcgacact ggcctctcta atacaacctt gaaactcttg acaaacaagt 360

gcctcccaaa tcacaatgcg cgcaacacat tccccttgat tcaattcaac aaagaccgaa 420

gagg 424

<210> 3433
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104h05b1

<400> 3433

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agtgtcttta ggcggtaacg ctggagccat gatgcaagca gaccggaaga ttacaagata 180

gagacacctc gagggacata tctggaggac tggtttggaa aggcaagaac tgcaatgggc 240

tgtggtcgag gatgtacacc aggcactgag gaactggcaa tgtgagggca tgaaggttta 300

catagactcc aatggcagta gagagggaca gaggctactc tgcggacata catctgat 358

<210> 3434
<211> 553
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316104h10b1

<400> 3434

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gccgcggacg cccaggcgga tcctggagtc ctacaccatc aagggatccg acggcgtcat 120

ccgccctggg gactctgtgc tgatgaaggc gcccgacaca tcaaagcctc cgtatgtggc 180

caagattgag gaaatcgagg cagcaggacc tcggggcgca aatgtcaagg ttaaagtgcg 240

ctggtactac cgaccggagg agtccattgg tgggcgcagg ccattccatg gcgagaagga 300

ggtgttcctc tctgaccacc aagatgtgca gagtgctgat accatagagt gcaagtgcaa 360

cgtctacagc ttccgggact acaccaagct ttctgctgtc aatcctgagg actatttttg 420

ccgcttcgag tacaaatcaa tcacaggcag ctttgtgcct gaccgcatag ctgtgttttg 480

taagtgtgag atgccataca accctgacga tcttatgatc cagtgtgagg aatgctctga 540

ttggtttcac cct 553

<210> 3435

<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106a12b1

<400> 3435

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tatgcctgga ccaaccaaag ctgggtttgg tgtggttgtc cttgacggga agctcatcgt 120

cattgctggc tatgctgctg accatggcaa ggaatgtgtt tctgatgagg tttaccagta 180

tgattgtttc ctcagcaggt ggaccgccct ttctaagatg aatgtcactc gttgcgactt 240

cgcgtgtgca gaggtcaacg gtgtgatata tgttgctgga ggatttggtc ccagtggtga 300

tagcttatca agtgtcgaag tttatgaccc agaacacaat aaatggacgt tgatcggggg 360

ccttcgtaag ccgagatggg gttgttttgg gtggagcttt gaaggcaaga tttacgccat 420

gggtggcccg tcgaagctta caattgg 447

<210> 3436
<211> 579
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106c06b1

<400> 3436

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tgaggaaaac aaagcacctg atgcctctca ggaagcagat tctcaggaca ctaatgagaa 120

ggcacaagaa gatgaaagca aggtagttga acatcatgat ggagatatca cggaccatga 180

caatcactca ccagaaggcg agacatctgt tgaagtgcct gacattaaag ctgggactgg 240

agatgatgaa ccaccggtgg agacatctgc agtacctacc gaggagcagg accctacttc 300

tgtcaactct gaaggtttgt caaaggcgga attgggtcgt ctggtagctt ctcgctggac 360

tggagaaaat gtagatgatg ttggtaaaag cgataaaaag ggccatgagg atgagctgga 420

tattccagaa cctgcagaag aagcatttga agatgagcat gatataccag aacccgtaga 480

agaaaaatat gctggctatc attcagaagt tgaggatgat aggcacaaat ttgaagacga 540

agagtgtcta atgatcagat gatgatatgt tgtgacatg 579

<210> 3437
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106c08b1

<400> 3437

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catcaaatta caacaaactg cccgccgttt tacaacaacg tgactgctaa aaccatggtg 120

ttgcccaact taatcatctt gtagcacatc atccttttgt cagctggtgt aatagtaaag 180

aggagggcac cgatcgtcgt tcttaacaat agctcagcat gattggtgaa tggtacgagc 240

cctgcagcgg cgcatcaaga agccgcggct gttgtggtta cttccagcat gaccgctgca 300

atagtcagca gcgtagtagc cgctgctttt gttgttttct tttccttttt tgtcacg 357

<210> 3438
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106c09b1

<400> 3438

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aaaacggcct agcggttc 78

<210> 3439
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106e11b1

<400> 3439

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gataaatgtc atttgctcag caccggaagt tgcagatagg gtgaagagcc agttgaagcg 180

attggcacgg cccatgtact caaacccacc tattcacggt gccaagatcg tcgccaacgt 240

tgttggagac cctaccatgt tcggtgagtg gaaagaagag atggaacaaa tggccggtcg 300

gatcaagaac gttcggctga agctttacga tagcttgact gcaaaggatc agtctggcaa 360

ggactggtct ttcattctga gccagatagg catgttctcg ttcacaggct tgaacagacc 420

ccagagcgat aacatgaccg ataaatggca catatacatg 460

<210> 3440
<211> 561
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316106f06b1

<400> 3440

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tcaccctcgt cggcctcctc ggcggcggcg tcctcctcgt ctacaacacc agcgctctcg 420

ccggctaaga gagcatctac gtgtaacaca gggccgggtc tttgcttgca tgcacgtctt 480

tgtaatctgc gtagctacct nctgtgaatg tatgcaatca acgatgcaaa gtaattgatc 540

cgaacagatg gtttatgtgt a 561

<210> 3441
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106f09b1

<400> 3441

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agaagtccgt acaacatgag cgatatcatt ggcccctccg agggcacacc cgtttacttt 180

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<210> 3442
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316106f10b1

<400> 3442

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tactcaacgc tgccagaggc tcatgcctgt actgctgggc tcaagtctgt gacaacatct 120

gccacagctg acgccattga agagtgccga aagctctgtg gcggacatgg ttacctgaac 180

agcagtgggc ttccagaact gttcgcggtc tatgttcctg cctgcaccta tgaaggagac 240

aatgtcgttt tgctcctgca ggttgcaagg tttttgatga agaccgtctc tcaggtggcc 300

actgggaagc aacctgtcgg caccatagct tacatgggca acatacagca cttgatgcaa 360

tgcaaaagcg ctgtaaatac agctgaagac tggctcatcc tgctgncata aaggaggtgt 420

ttgaagctgg gcactgagga tggcggtgaa ctgtgcgcag aacat 465

<210> 3443
<211> 199
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106f11b1

<400> 3443

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aaccgagacg acagaccgac ggggacaaaa gaagaacagg cccaccacga agacagagca 120

aaaagaggag cccagacaac accagcgcca aagcaaggta ctggcacgct ggtcaaacaa 180

ccgaaagaga ccgagaaaa 199

<210> 3444
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316106h09b1

<400> 3444

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gacccacaac agttcgactg cgaacacccg gcggtatcac agctctatcg cgtcgcagca 120

catccgcgga ggaccagatg acgaaagatc aactgagcgc ccacctaccg tcgttgcgaa 180

cacaagtgca ccgtgaatgg agactgacac gcaccaaaga acaactcact ctccgcgtgg 240

catatcttaa atacgcgcat gatgacacga gcactaacct gggcacta 288

<210> 3445
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316108b10b1

<400> 3445

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gagttcgtca agttctacaa ctgctggaac gagttcgaga gcgcgtacac ggcgcaggcg 120

ttcgtgttct gcgacaaggc ggggccggac gcggagctgg tggtggtggc gttccggggg 180

acgccggcgt tcgacgcggc gcggtggcgc gccgacctgg acccgtcgtg gtacaaggtg 240

ccgcggctcg ggcgcgcgca cgccgcctac acgcacgctc tgggcgcgca acgcaacatg 300

gggtggc 307

<210> 3446
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316108c01b1

<400> 3446

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gaaagacatg caccgttctt gaccgacccg gcgggagcgt ggatgacgac tactgcgtgg 180

gcgtgctctg agccgacccg gcgggcgcgt acgccaagga cgcacgaaac tagccgcatc 240

tccaccaacc tcaccgggga caacatcacg ttgacggtgc tcgtactcta ggacctggcc 300

aatagcctaa gagactgcct ccggatatac agggaaatga acaggcccct ggaggccgcg 360

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ggagag 426

<210> 3447
<211> 620
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316108c11b1

<400> 3447

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gtctcctcct ccctggtggc cacaggcgcc ccgcccggtc agctgcacat tcttagatcc 180

ggaggccaat ctagtacagg tcgagcccat ggtgatgttg ccacggtttc tcctccccgg 240

tgctcctaga tccaacacta gctcactaga ggcagggcgg nggttctgga ccccctcgcc 300

tccttccctt agaaggctgg aaagcaccca catgactcct tatgagcaac cctctttatg 360

gggggaggaa gagggacact ttttttttgg gggggaaaaa aaaaccaacc ccggaagggg 420

gggttggggt gtttattaaa acccccccccc ccccccccccc ccctttttttt ttttttttaaa 480

aaagagaaag gggtgttttt ttttttttttt ttttttcctc aaacagggaa gggggggagcg 540

ggggattttt ttttttttttt ctctctctgc gaaaaaaaaa aaaaaaaaaa aaaaggggggg 600

gggggggcgc ccccccccccc 620

<210> 3448
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316108e10b1

<400> 3448

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agcctctcgt ctccgacgga tcaaggaagg aggccaggag cagcagcaag atcagcagct 120

cgattgggca ggcaaggggc ggatggagtt cgtgctcatc atatccctgc cgctcctcat 180

cctgatcctc atcatcgccg tcgtcctctg catcgtctgc cgctagccac atgccgacgc 240

caaagcgctc gtctctgctc ggtctgctgt gactgcggtc gcaccatatg ttgtgttaat 300

caatccaata ttacatcatg actcggcata gaaaagaaaa gaaaaaaggc tcctctccac 360

caccatttct atttttctgt tctggccctg tggtgtgatt agctggctat agctctactg 420

gctctcctga tggcaacaaa agcatcgatc ccgtgcgtcg atgcgcaatg catatgatat 480

ac 482

<210> 3449
<211> 434
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316108e11b1

<400> 3449

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agcaaaagct cttccagaag ctcactgccc accggagcta gctgaacagt actaccaaaa 120

gttacaggga aacgacataa aggcattcag gtcattttat caatcactta tcgagaaaat 180

aagacaacag cagaatggga gtcttgtgtt cagatagcat catcctattc attttcaatc 240

tgtttgccag aagactcgtc agctgtatga tttgagtata gggtagttgt atcagtgatg 300

tatataaagc taccatttct gagattagaa gatgtataat gcgggaacat ttttacagac 360

ctgccgtggc gaagttgact gttcaccgca tgtcatcnga tgcagggaag tataacccaa 420

gagtttgtca tgag 434

<210> 3450
<211> 506
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316108f10b1

<400> 3450

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ccttgggctt ggttcgctac tgctgccgcc gtatgctcat gacccatgtt gacctcattg 120

agaagttgct caactacaac accctggaga agacggagac aagttgaagt taattgaacc 180

cattctgcct cgaaaccttt gttcctttgt actttccaag atgctgtttc ttgcgtcagt 240

gcttaggagg tgcaaagtga ggcactgaaa tgaagttggt ttgttcatga atctccaagg 300

actgttagtg tgaccatgcg tttctactat gtgatcttca aggctatatt aaccaacaag 360

tctatgcatt ctccagtttc agacttatta agctccaagc gttgaacatg ttattcctgt 420

gctttctgtt ggatgtagtt ggttgtgggc acccatttac cattgaatcg tcactagtga 480

tatgcattga accttcacat gtacct 506

<210> 3451
<211> 153
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316108g02b1

<400> 3451

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cacggggcgg aggcacacan gacgaaagac gaacngaccg cccgccgccg cncgggggga 120

gaacaacaga accaggcaga cagacaggcg ggg 153

<210> 3452
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316108g07b1

<400> 3452

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gggtcccacc ctgcggtccc cgtcctggca acccaggggt ctttcgttgg ggcagccaaa 120

tttaatttct tgggcggggg tcccacaccc gtggccggga aaaccctggc catcccccag 180

tttgagcacc tggcaggcct tccccttta accggttggg aaaaaaccaa aagggcccca 240

gcgggcggcc tttccaaaag gtcggcaccc ttgaaggtta aagggacccg cccctgctgg 300

gtggcataag gcccgccc 318

<210> 3453
<211> 373
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316108h06b1

<400> 3453

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accncggcac gcgggaggga ccagcaccga ccgagagggc ccaccccgag cggggaagag 120

gaaggcaagg cggacgacca ggaccgcagc tacgccgggg gccacgccgg ggccaccgac 180

gaccagagcc gacagaacgc ccccccccaag cacggcgacg gcaccgacgc caagaacaac 240

acngacaggg agacgggcac gacccgcggg cgcggggncg gcaccagcgc agagaacaag 300

gcgaagcccc aggcgaacga ggccaagaac ggccaggacc aggacggccg caacaggacc 360

gacaacgagg cgc 373

<210> 3454
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316108h07b1

<400> 3454

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gaggagggca tgactaacga tgaactgact gcccgcctgc gttcgctggg tgaacaaaca 180

aaccgagatg gaagtcagac tgacacgaac gaaaaactaa ctgctcctgc gggagaccta 240

acagaaagag gagcttgctc acacgatgac taaggtaggg actggccgtc gacaaacaac 300

gtactgacaa aaaaaccgcg gacccaacca aattaaattg catg 344

<210> 3455
<211> 443
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316112a06b1

<400> 3455

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ccccggccaa gcgtaagacg gacaccgact ccgagatctc tcccctcgac ccacccgcca 120

aggccgcccg ccccggcgct gacgaggagg ccgccgccga ggccaaggcc cgggtcgcgg 180

acaaggggaa gggcaagatg gtggtcgatg aggaggaaga aggcgaccag gaaagcgacg 240

aggaggagga tgacgaggag gtcgagggag atggcgacga gagtgacggc ttatgcgagg 300

atcccctctc cgaggtcgac ctcaacaaca tcctgtgctc tcggacccgt ctgtgctgcc 360

cagcacagcc tggggcgtac ctggcgccac cagaggaggc agcngaggat gactaggacg 420

atgaggacgc aaacgtcgac atg 443

<210> 3456
<211> 467
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316112a12b1

<400> 3456

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cgtgacggcg ctgatgttgg cgctggtggt gctggcggcg gcgccgggcg gggcgcgcgc 120

ggcgtgccag gcgtcgcagc tggcggtgtg cgcgtcggcg atcctctccg gggccaagcc 180

gagcggcgag tgctgcggca acctgcgggc gcagcagggg tgcttctgcc agtacgccaa 240

ggaccccacc tacgggcagt acatccgcag cccccacgcg cgcgacaccc tcacctcctg 300

cggcctcgcc gtcccgcact gctaggcgcc ggcaggcccc tggcgcatat ggctagctag 360

ctgccgccgt gagagtgtca gactatagct agccctagct gagtgcgtac gtgttgcgtc 420

catgaacgca tcttcctgct aaactactat gtggnntcga cttgctg 467

<210> 3457
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112b02b1

<400> 3457

aaaacgcctg cgcccgcacc caaaaaacgg ggataccacc ggcgacccgg cgcgagagca 60

caccgaggaa cataaaacac cggcggcgcc gggggcacac ccagaagagc acgagcccgc 120

acaacgggcg aaaacagggc cccggggcgc cagcgacccc ccgcggagga gcccaagaca 180

aaagaagaac agagcgcccc cccccgcccg cggggagaac aaccgaaccg agaggacagc 240

ccgacgggga caaaagaaga acgggcgccc cgcggggcag agccgaaaga ggagccggag 300

gacacgaggc ccaagccggg cacgggc 327

<210> 3458
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112b12b1

<400> 3458

acaccgacac gagcgagagg gccaacaagg gccagcaaga agaagaggcg cggcccgccg 60

gccctgagga gggcgcgggc ggacaagggg ggggagcagg gcccggcgcg cccagggcgc 120

caggcgggag aaccgcagga cgaaagaaga acgaaccgcc cggcggccaa ggcggggaga 180

acaagcaaac ggagccggca ggccgaggag gacaacagaa gaacgggcgc caagggccgc 240

a 241

<210> 3459
<211> 485
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsf19316112c05b1

<400> 3459

gcgctcacct tcgaggctcg gccatggcgg actaccactt cgtgttcaag gacgtggagg 60

gggcgaccac gcagtgggac gacatccagc gcaagctcgg caacctgccc gagaagccgc 120

cgcccttcaa gccgccggcc ttcgccccca gggccgacgc cgacgagcag cccaggtcca 180

aggagtggct cgacgcgcgc gaccccgacg agctcgagga gctcgaggac gacctcgacg 240

acgaccgctt cctcgagcag tacaggagga tgaggcttgc agagctcaag gaggcagcaa 300

aaactgccag attcggcaca gtacagccca tcacaggctc tgattttgtg cgtgaggttt 360

cgcaggctcc accggatgtc tgggttgtgg tcttnctcta taaggatgcg ataccagaat 420

gtgggctgct tgagactttg ctggaggaac tggccacata aaatgcataa accaagtttg 480

ttaaa 485

<210> 3460
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316112c09b1

<400> 3460

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cggggagcag ggaggccgcg caggcagcga gcctggcgga cgcgcgggca acgaatccat 120

ccatccacgg ccggtgcggg caagcaggcc atccgcgcgg gcggagagca gggaggccgc 180

gcgggcagcg agcatggcag acgcgaggac ggcgagcatg gcgcgcgtgg gcggctcact 240

ccaccgacga cttcttccat cgggcgcgcg gcggcctctt ccctcgagcg cgcagcggcc 300

tcttccctcg ggcgcgcggc ggcctcttcc tcgagcgcgc ggctgtctct tccctcggcg 360

gccgagggcg gcctcctccc tccggcgtcg gcccgccaat gctgcaccgg tgcacggcgg 420

tgcccctctc tctctccagg aaccagcgag cacggtcggg cggcggtgcc gaaacccagg 480

gtcggagagc g 491

<210> 3461
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316112c12b1

<400> 3461

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cgcgcaagga cgaggtggtg acacgcgagt acaccgtcaa cctccacaag cgcctccatg 120

gatgcacctt caagaagaag gcaccaaatg ccatcaagga gatcaggaag tttgcacaga 180

aggccatggg aaccaacgat gtccgcattg acgtgaagct caacaagcac atctggagca 240

gtggcatcag gagtgtcccg aggagagtcc gtgtcaggat tgcccgcaag aggaatgacg 300

aggaggacgc taaggaggag ctgtactctc tggtcacagt tgctgaagtt ccccaggaag 360

gtcttaaagg tttgggtacc aaggttgtgg aggatgagga ctaaaccccc tgtctgtcgt 420

atcgatcagt tagaacttaa tacatatctg ctgagagcat a 461

<210> 3462
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316112d06b1

<400> 3462

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gtgaaggcca tcaggaggaa gaccaccggc accgggagga tgaggtacat gcgccatgtg 120

cccaggaggt tcaagagcaa cttcagagag ggaactgagg ccgcaccaag gagcaaggga 180

gcctcttcca gcggcaacta ggcgtgacag tctccatttg ttgccctaag cgaagccctg 240

atcatcaaac ttagcttttt tgttgttttc tactggaact cttatgtttc tatgttgaga 300

ggcagactat atgatgcctg gttatgttat ttgcacaatt gtcgtggacg ttaatccttc 360

agttttgaat gttgaattgt gtc 383

<210> 3463
<211> 483
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316112d09b1

<400> 3463

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gagcccaggc aggaataaaa cagcaccgcc gccgcggccg gccgacccag aagagaagcg 120

cgcccgcaac aacgggcgaa aacagggccc cgggggggcc caaagcaccc ccgggggagg 180

agccccacga cgaaagaaga acngaccgcc cgcccccgcc cgcggggaga acaaccgaac 240

cgagaagaca gcccgacggg gacgaaagaa gaaccggcgc cccgggggggc agagcaaaaa 300

gaggaccccg acgacacgag gccaaagcgg ggcacgggcc gacgcaaaca acgagaagac 360

gggaaaaacc ccggggcccc ccaacaaaag cgccgagaag cacaccccca ctgcgccagg 420

gggcgaaaaa acgaagaggc ccgcaccgag cgcccatcca aacagtcgca caacccaaag 480

ggc 483

<210> 3464
<211> 496
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112e05b1

<400> 3464

ctactacctc cccgcaactc gctgctcctc ccacaaccga agctcagtcc cgtggccacg 60

cagaacaaaa tgcagcgagc aattcaagct atccgatcac atggcagtgt gctcaaatct 120

gctgtcctgc aacacatcag tgttgtgaag cctgctatgc tgcccgctgt gttcccacgc 180

ttcatgtcag tatcatctgc tcaaatagag gagagtggat ttgagagcag cactgttgca 240

gacattttga agtctaaagg gaagagtgcc gatggatcat ggctctggtg caccactgat 300

gatagtgtct atgatgctgt caaatcgatg acacagcaca atgtgggagc tttggtggtt 360

gttaaacctg gggaagataa atcaattgcg ggcattgtca cagagagaga ttatctccgg 420

aaaattatag tgcagggtcg atccttcaag tcaaccaaag ttggagatat catgaccgca 480

gagaacaagc tgatca 496

<210> 3465
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112e09b1

<400> 3465

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gcaatgtgtg aatttatgaa atttctgaga ccccccaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaggaa aaaaaaaaaa aaaaaaaaaa aaaaagagac aaaaaaaaaa aaaaaaaaaa 180

aataaaaaaa aaagaaagct aaattaaaac tactgaaaaa tgcaaacaaa attcaatgca 240

cgggaaaacc actttacaaa cccaagacta aaaaaaccaa gtcatcccca tttcaacagc 300

tttcaaaata aaaaacatgt ccgcaacaaa cgcaatatcc aacagacgca cacccatatt 360

gc 362

<210> 3466
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112f04b1

<400> 3466

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aagatctatg acatgatgag cacagctatg gcgggcaagt gggcgtcgca gccccaacct 120

gcccagccaa gccagcagcc tgctgcacct agtagctctg aacctgagcc gcttgaagcc 180

gaggtggtgg aacccgtcga ggctggccag cagaagtgag aatccgcatc gtgggaaatc 240

catcagggtc gatgtcaagt gcatacgcgg gtgctatccc aagctctctg cttgttcctt 300

ttttattatg ccggaatcgg cttacacggc atgtatgatg agccgtgcga gtgctagtat 360

acacttatcc tagatagggg tgtggtgata ctaataatag gactgaacat tttggccttg 420

aacacgctgc ctgctacttt actt 444

<210> 3467
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316112f08b1

<400> 3467

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aaggcgcaag ggctgacata ccgaaagcgc cacaatacgc acgaagtgac ccagatctcc 120

ctggacaaga ccccacgagg aaggattgag taccagccca cctagaagcg ggagagtaac 180

acaaaacgcc cggataccgg ccagacagat ccaaagaaaa acacacccgc tgcctacgga 240

aaacaagaag gacagactgt gaaacaacag gacgactgtg gaccgtg 287

<210> 3468
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316112g08b1

<400> 3468

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ccctcctcct cgtcccgcag ccgtcgtttc ctcgccccca cccaaaccgc ggcgccggga 120

accaccacca gcggcgggtt cgcggcgatg agctggctcg ggaagctggg gctgggcggc 180

gggggaagcc cgcgcgcgtc ggaggcgtcc gcggcgctgg cgcaggggcc cgacgaggac 240

aagccggcgc ccgggagcga gttcgcgcag ttcggggccg gctgcttctg gggcgtggag 300

ctggtgttcc agcgcgtgcc cggggtcacc cgcaccgagg tcggctacag ccagggcgcc 360

ttccacgacc ccacctacga ggacg 385

<210> 3469
<211> 226
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsfl9316112h07b1

<400> 3469

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cggcgcgaga gcaccaggag gaaacagaac agcaccggcg ccccgggggc ccccccgaag 120

agagaaagga gccccaacaa ggcggcggaa acgggggccc cgggggggcc agcgccaccg 180

cggaggggga gcccgacgac aagaagaaga accgagccgc ccgccc 226

<210> 3470
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316112h09b1

<400> 3470

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gccaatgatt gtgatttgga accggttgct tatgagttct ttactcaagc attcatctta 120

tatgaagaag aaatagcgga ttctaaggct caaattactg cacttcacct aataattgga 180

acccttcagc ggatgaatat atttggggtg gaaaatagag acaccctcac tcataagaca 240

acagggtact cagcaaaact tctaaagaag cctgatcaat gccgggcagt ctatgcatgt 300

tcgcaccttt tctggactga tgaccaagat ggaatcactg atggtgaaag ggtcctcctt 360

tgcttaaagc gtgccttgag aattgcaaat gctgcttcac aaatggccaa tgtatcacag 420

ggaagcagcg gatctgtcat tctattcatt gaaattttga acaagtatct gtacttcttt 480

gaga 484

<210> 3471
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316113a12b1

<400> 3471

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ctcaggagta cagagcttat caagagcaag ttatgagtaa ctctgctaga tttgctgaga 180

gcttaacttc aaaaggctac gacattgtct ctggtgggac tgataaccat ttagttttgg 240

tgaacctcaa gaaaaaggga atagatggct cacgagtgga gaaggtttta gaaaatgtgc 300

atattgcagc aaacaagaac acagttcctg gtgatgtttc aactatggta cccggaggca 360

tcatgatggg aacccccgcg cttaca 386

<210> 3472
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316113b04b1

<400> 3472

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gacgcctacg cgccccggcc gtccaagctc cgtgcagtgg tctgccagtc cgacccgtcc 180

aagccggagg ccttcgggtg cgccacctac gacggggtca tcagcgaaca cgtctcgctg 240

cgtacatgga aggtgccaca cacgctccgg tcctccgcgc tgatggtgtc ctggaagccc 300

gtccctatgg agcagcgcgt gagggacacg tgcc 334

<210> 3473
<211> 113
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316113c01b1

<400> 3473

ggagaacaac agaaccgaga agagacccag acggggacaa aaaaaaaacg ggcccaccac 60

ggggcagacc agaaagagga gcaggaagac acaaggccca agcgggacac cgc 113

<210> 3474
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316113c10b1

<400> 3474

cacgaccaca gggaaggagc taagctatgc accgtctaac agcccttgct gccgtcccga 60

tggcatgcac caacatggcg ccggccacct ccagattcat gctggcggcg ggcatcccca 120

gctgtaccaa cggctgcatg agcaaccatg aactggttgc ccccctcaac cgactgggct 180

tgcagctcgt cgcccatgcc agggtggcgg ccactgacga cgaactggcg ctaccagtgg 240

cagacgtgaa agag 254

<210> 3475
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316113e06b1

<400> 3475

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cttgtgatcc tccacatgaa tatggccctc catgtatatg acgatataat gaggatgaca 120

gaaaatttga gcgagaaata cataattggg tacggggcat ctagtacagt ttataaatgt 180

gttctgaaga actgcaagcc agtggcaatc aaaaagctat atgctcacta cccgcagagt 240

gtaaaggaat ttgagactga gctcgagaca attggaagta tcaaacaccg gaatcttgtc 300

agccttcagg cttactcgct atcacctgct gggaatcttc tcttctacga gtatatggaa 360

agtggcagcc tctgagacgt tttacatgca ccttcgtcca tgaagacaaa actggactgg 420

gaggctagac tccagattgc tcttggcact g 451

<210> 3476
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115a04b1

<400> 3476

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gggagcgcac catgagagag acagaaccgc tgaagcggtg gaggcacccc gaagagagcg 120

ag 122

<210> 3477
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115b04b1

<400> 3477

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agcaaagatg gacccgaagc tagaggcgta ggtctacgtg ggggtgtccg taggcgagac 120

cggaggcgat gactggctgg cccccaagat cgggcccatg agcctgtccc tcaagatgat 180

cggcgaggag atcggcgagg agaccgccaa ggactcggag gaggtctgga agagcctcaa 240

ggtcaccgtc cagaacagcg aggacaaggt ctatgtcaaa gcttcggtcg tggctctcgt 300

catcgagctc ctcaatgagc cccttaagga cacgcagaag ggcaagaac 349

<210> 3478
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115b05b1

<400> 3478

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gctcgctagg aaggaagcca tggagatcgg gtctctggcg ccgcgtgaga ggccgcacgc 120

cgtgatgatc ccgtacccgg ctcaaggcca catcacgccg atgatgaagc tggccaagct 180

gctccacgcc aggggcttcc acgttatctt cgtcaacaac gagttcaacc accggcgcct 240

gctgcgctcc cagtccggcg acaggctacg tgggct 276

<210> 3479
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115b07b1

<400> 3479

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tgctgcggag gaagctgcgg ctgcggcagc gcctgcaagt gcggcaacgg ctgcggcggc 120

tgcaacatgt acccggaggc tgaggccgcc ggcgccaccc tcctcgtctc cgccaccgcc 180

acccacaagg cgagctccgg cgggatggag atggcggcgg agaacggcgg ctgcggctgc 240

acccagtgca agtgcggcac cagctgcggc tgctcctgct gcagctgcta gatcatcgat 300

catcgatcat cgaccatgca tgcacctgcc gcgcgcgtgc atcatatcta tgatcgatcg 360

gtccatctac taccatgtgt aacgccacct ggtcgagggg ctttgatgta tgtaagcacc 420

tgccagcatg agcagagcat gtgcacttcc atgcatgtaa accgacccct aat 473

<210> 3480
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115b09b1

<400> 3480

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agctccgcac ccaggtggtc gctccggcgg cagcaacaca gtcgtcgtca tcggtgttga 120

tgaggagcgt aggcacaaag atgacgccaa gattgacagc taggagcagt cgaggagcgg 180

cactctagcc ggtgcatgcc aatcaaatga aggcggaggc gtagaacaac atgaccaaga 240

agtaggcgag atcgaggcga gaaaggacgg ccgggtagcc cgatcggcgc gataggtgga 300

gcgcatccgg aagatcgacc gcatgtcgtc ccggttccag tgttgcgact gattcctgag 360

ctgaaaaata aacaaaat 378

<210> 3481
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115b10b1

<400> 3481

aattaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagagag caaaaaaaaa agaaaggcag 60

gcgaagcaaa aacagggcgg ccggaaaaaa aggaaacaca agcgccacaa aaagcagccg 120

gggggggccgg aagagagaac ccagggtcca cggacaaaaa aggcagggcc acagctttac 180

aacggggcac caggaaaaaa tttatcgggc ccaagcttaa agacgctgga aaacaaaacc 240

cctgggcgcg cccaaccaaa accgacgggg gcccaacccc ccctaccc 288

<210> 3482
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115c01b1

<400> 3482

actgtatgag tggttgatgc atgcttttgc agctcaatct gaagttcgta gaccagaaat 60

aatattgaat aaatgatgca ccttgacgag ttagattgtc ggcagcatct catcttctca 120

tcttcaagtt tgagttgcgc caaccacata taatgtgcct cgtcgtcgag tcaacaagcg 180

gctgccggct gcgtcttgtc tccaagccct aatcagcagg tggattgatt ttaatgaaag 240

aagaacgatg catgttaatg cggtgctaac aagatttgaa tctgaatgtg ccttatccct 300

attagtattg aacaaacttt caaactccac gggaccactt ctgattagca cctaattaac 360

taacttaatg ctaaggaggg ttggtgcgat 390

<210> 3483
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316115c06b1

<400> 3483

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cgtccggctg ctgggctact gcgtcgaggg agcgcaccgg atcctggtgt acgagtacgt 120

cgacaatggc aacctggagc agtggcttca cggcgacgtc gggcccgtca gcccgctctc 180

ctgggacgcc cggatggaca tcgtgctcgg gacagccaaa gggatcacgt acctgcacga 240

ggggctggag cccaaggtgg tgcacaggga catcaagtcc agcaacatac tgctggacaa 300

gcggtggaac tccaaggtct ccgacttcgg cctcgccaag ctccttggct ccgacagcaa 360

ctacgtcacc accagagtca tgggaacatt tggctacgtg gcgccggagt acgcgagcac 420

cggcatgctg aacgagagga gcgacgtgta cagcttcggg gtgctcatca tgg 473

<210> 3484
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsf19316115c09b1

<400> 3484

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tttgtgaaga ggcatctcac tggagagttt gagaagaaat acgaacccac cattggtgtt 180

gaagttcacc cgttggattt caccactaac tgtggaaaga tccgtttcta ctgctgggac 240

actgctgggc aagagaagtt tggtggcctt agggatggat actatatcca tggtcagggt 300

gcgattatca tgtctgatgt cacttcaagg ctgaccta 338

<210> 3485
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115c11b1

<400> 3485

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gcagacacag ctcaatgtac atttggcggc ccctgatact ggtgggtact gaacaccggc 120

agaatcatgg ataattgcgg tggatgtgaa aatatgtgga gcgagtcaga gataccagat 180

gaacggtatg ggccgcctat gatggctaaa agaaaaccag cacaccacag ttgcacagac 240

taaaaggaac gaactactga ttgtc 265

<210> 3486
<211> 218
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115e01b1

<400> 3486

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aagggcggag agggtctggg gaggcttgca ctaccccaga tgggctgact gtcatcctgc 180

tgtcgatggg agaccgactt gtgaaccttg tgatccag 218

<210> 3487
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115e07b1

<400> 3487

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ctgcaaagct catgaatttc ccctcgacgg cgaggattac gccagagccc ctcggcctcg 120

tgctcgtcat ctccgcctgg aactaccctc tcttgctgtc cctggacccg gtcatcggtg 180

cgatcgccgc cggcaacgcc gttgcgctga agccgtctga gggggcacca gccatgtcgt 240

cgctgctggc cgagctgctg ccgcggttcg tggacggcac ctgcatcaag gtcatcgagg 300

gcggcgtcaa ggagaccacc gcgctcctaa accagaagtg ggacaaaatc ttctacacag 360

gcaacagtag agtcggacgc gtcgtgatg 389

<210> 3488
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115f06b1

<400> 3488

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gctggcgcag catgcggggc gcgtcgacgc caagatgatc ttgtacgacg tgatgcaggc 120

ggacgaggtg ccgggccgca acgggctgac ccacgtggaa gaccaggcca atcggtacag 180

ccgcggctgc gaggcctcca aggagtgcag aggctaagct ctaatccagc catgctcaat 240

gaccaatttg tactccttac attcctcagt taccttgttg ctacttctgc tgttgagagg 300

aagataaaac cccgcgcgat tgctatggaa tttgtttg 338

<210> 3489
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115f09b1

<400> 3489

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aggttactgt agcaccagta ctttatccgc tggatctcca acatctagtc caagtgagga 120

aagggtttcg tcagggattt ctctgtcctg gcaggatgtc tataatattg ctgtcaagtg 180

gagacagatt tctgaacctt gtgatccagt tgtttgggtc aataagctaa gtgaagagtt 240

caattctggt tttggttctc acaccccatt gctttttggt caagcgaaaa ttggtcgc 298

<210> 3490
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115g02b1

<400> 3490

attgtgggac ttgctccacc tctcggagtc cgaggcaatg cccgtattcc cttccccccga 60

ggacctcagg ggcaagatca tcatatcaac caaaccggca aaagagtacc ttgaaaccaa 120

gagtagcaag gaggaggccc aaaatggtag cgcggaggag agtgtgtggg gggacgagat 180

tcccgacaac aaggctcacg ttgatactgc tcgccaggtt tcagagaagg acaactaccg 240

ttatggggaa gaagatga 258

<210> 3491
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115g08b1

<400> 3491

gctaagcaca ttccgcagct gtcaagatgg atatgccgtg aaatcatcac ttaaagctga 60

agatggattg ctgtatcctc ttgaaaaagg ctttttcttt ttgccaaagc ccccgacgct 120

cattctgcat gaggagattg agtatgttga atttgagcgc catggtgctg gcggcgctag 180

tatgtcatct cactattttg atctcctggt caagctaaag aatgaccaag aacatctctt 240

cagaaatata caaaggaatg aataccataa cctcttcaac ttcgtcagtg gtaagaattt 300

gaaaatcctg aatcttggag aagatggcca agatagaact ggtgcccgtg cggctgctct 360

tcagagcact gatgatgacc 380

<210> 3492
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115g11b1

<400> 3492

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ccgctcgcga tctgcctccg cgagcccaac cacccctcgc cggagatgcg cgcctggtga 120

tccggagggg aggagagggc cgatgaggtg caagctccac ccgtacgcga acgcgctcgg 180

cgtctgcgcg ccctgcctcc gcgaccgcct cctcgtgctc gccgccgagc gcgaccgggc 240

cggggccggg gccagcagcg gcgccgactg cagcagcagc agcagccggg gcagctcgcc 300

cgcgcgcggg cgcgccgcgt cgaccttcgc cgccgacgtc gtcgtcccgg cgcagcaaca 360

ccggcgctct gacgcctgcg cctacacgt 389

<210> 3493
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h01b1

<400> 3493

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cagaaggaga aaataatgaa ccggaggttg ttccttcgat tacaccccca aacaatggag 120

tactgctgat cgcgaatgca tatcctgttg aatatggtca cattttcttg gtcccaaatg 180

caactaatca gctatcttcc ttttgggata aaaggatgtt tgggctgatt acaaagattg 240

cctctgaagt aaacagtgca gcgttccggg ttttctttga tgatggtaca tctattgtgc 300

caaagcacat gttttttcaa gcctgttact ttgccaatcc tttaccagtg gagtcttcct 360

caacttgtgc attatatgat ggggcaacca gatcaggcat ttgtgtgtct gaaatgttga 420

ataccctcta aaagcactt 439

<210> 3494
<211> 362
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h02b1

<400> 3494

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ctgacgaccg tgaaggggcg ctacaacaac ttcggcatcg caagtgcgct catccagcac 180

gcgtggaggc ccaagtctct catcaccttc tccaccgagg ttgacaccaa ggccattgag 240

aagagcccca agatcgggct ggccctgtca ctcaagccct gatgtgggat tcgtgggtgc 300

gttaggatgc tagcattttg gtaccatcag ctcttggtcc aacgaacaaa gcttggacag 360

ac 362

<210> 3495
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h03b1

<400> 3495

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caagaagctg cccaacgccg gcgccaagaa ggacgagagg gccgtcaacg ccgcccgccg 120

cgccggcgtc gacatcgaca tcgccaagaa gcataatgct gggacaaaca aagctgctca 180

tagcaccaca tcgctcaata caaagaggct tgatgatgat acagagaatc ttgctcatga 240

gcgtgtgccg tcagacctga agaagagcat tatgcaggct agaacggaca agaagctcac 300

acaggcacag cttgcacagc tgatcaatga gaagccacaa gtcatccagg agtacgagtc 360

aggcaaggct atcccaaacc aacagatcat cggcaagctg gaaagggctc ttggcacaaa 420

gctgccaggc aagaagtgaa gctgcgtgca tctgacagga gtcgagtctt tcagagagga 480

gcttg 485

<210> 3496
<211> 147
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h07b1

<400> 3496

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ccacaccttg gtaatacatg tgcaggtgca gaggcggcag ggccatggcg aggaggtgct 120

gctgcaactc atggacgtgt ccacagc 147

<210> 3497
<211> 259
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h09b1

<400> 3497

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accgatcgcc cgggactgtt tgccggtggt agtgtgcttg atgccccca acagcgccgg 120

caagaaggac tgggggact atatggcctt ccgccgcgcc ggcgtcgaca tggacattgc 180

caagaagcat tatgctggga caaacaaagc tgtttatagc accacatcgc taactccaat 240

gtggctctat gatgataca 259

<210> 3498
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h11b1

<400> 3498

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acctgcatcg aatgctgaga ttggcgggtt tggagctcta gtcttctcag gcttcatcgt 120

ctacgacact gagaacttga taaagcgcca cacttacgac gagtacatct gggcgtctgt 180

tgagctttac ctcgacatcc tcaacctctt cctgaccatc ctacagatgc tcaggcagaa 240

tgacaactga tgggtcctgt ctgaaccacc aggaccttgt gccaacccag gcatatgtcc 300

aacatttatc aagtcttttg aattgctatc tacataactc ggaagacatg gtagtgagtt 360

tttgccatca tccagagatg aggccaaagt acaaccatat gtataggtgt tctactgcga 420

gtttatgtgc ctgagtgttg gtaaact 447

<210> 3499
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsfl9316115h12b1

<400> 3499

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cgccgcgcgc ccgttcctcc ggggcgacct cgcggccgtc gaccccgagc tcccctcgct 180

cgtctccgtc ctcgtgtccg ccggcgccgg cgagtgctac cacaagcacg gcaccttcct 240

cgcgcacctg ctcgacgtct accgcatcct ccgcctttgg ggcgcgcccg acgccgtcgc 300

ccgttgcggc ctcttccact cctactactc caactcctac gtcaaccttg ccatcttcga 360

gcccgacg 368

<210> 3500
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316001b09b2

<400> 3500

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gggaagatgt accctgatct gacggagcag ggcagcgccg ccgcccaggt cgccgacgtg 180

gtcgtcctcg gcgtggcgcc tgagaacaag gcggggcagt tcgaggtggc cgccgggcag 240

tccggcgagg gctgcagctg cggcgacaac tgcaagtgca acccctgcaa ctgttaagct 300

<210> 3501
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316001c09b2

<400> 3501

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gaggaggatg ccgatgaggc caaccgtgtg ctaatggata atctgaacaa gactgggaag 180

gcttatcttg cacacacggt ggttggtgac aagttcgttc ttcggtttgc cgttgggtcg 240

tcactgcagg aggagagaca tataagaagt gcctgggacc tcatcaaaaa gactacgagc 300

agtatcatgg attaagtgga tggacctatt gacacataaa gttccaggag ctacacaaat 360

ccctatattt agggtatgat tattctttta aaattataat ttgtttttct tttgctttga 420

ttctgattat tacttatttg ga 442

<210> 3502
<211> 73
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316001c10b2

<400> 3502

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accatggatc gtg 73

<210> 3503
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316001f08b2

<400> 3503

ttttccgagt tcaagaaaaa ggtgaggagc cttgttcgca aatctcagga aatgctctga 60

aaaaggagga tcatatgggg gagtccacaa gcgctgcaat tctcttgctt tcaccaaatg 120

gggcacctga tgccagcact tgcacttctc ccctgtttat tttccgttca gcgtcggtcg 180

aatggtggtg ttggtcttgt ctctccgaga cacttggggt gctgcctatt atgaacttct 240

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atcgtagtca ttgccgggaa catcatatca aagaaattgg ctgttttgtg 350

<210> 3504
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002b11b1

<400> 3504

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gccggcgccc tctggctctg atcggaccct tccttccttt ccttagtttc ctttcatcag 120

aagacggtgc cgcggtttaa tcctggccgt tggatcgaat tttacaccgc ggccgattta 180

ctctaggatt ttgggtttct ttaatggtgt gctaaatttt ttctcaacaa atatattcat 240

gagaaaaaag aaacagacag gtagcattac tgtttttcgt aatttatttc gtctggtcat 300

gagcatgtga atacggaaga agagcgtgcg cggcattgca gcgtctgtac agtttgtcgt 360

ttctatttcc gagttaatga gaatcagatg cttcttacg 399

<210> 3505
<211> 71
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002c07b1

<400> 3505

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tatgctttgt t 71

<210> 3506
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002c10b1

<400> 3506

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acgggtatgc aggaagtcaa gagctgggat gcttgctgtt gttttaagat gtagacattg 180

tgtagtgacg tcggaaatga ggttccactt cttatttttt gcttct 226

<210> 3507
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002d07b1

<400> 3507

tcttctgtac aaaccattca gctcaaccaa tttgagcaga attatatgga aatgcgcagt 60

ctgatgtcta gcactgatgg aaggaacggg cctccgagca atgatcacca gtgcccactt 120

ggaacctacc ctaattgcca agggatgtcc cagaataccc aagaagcagc tcaagctgtt 180

ggaggaaact aaggcaaact gagggattat gagtatggaa tgaataccct aagtttatat 240

tgcttttact tccacgtaca gagtcatgtg gcatgagata tgtatcatgt cgtcaatgtc 300

tctgcgtagt ccggccgtag ctccctagat gctacacacc atcaagatct caggaatgta 360

cttatcctat atgctactgg tgtactggtt gaatttacgg actctcatat ctgtgtgata 420

cagt 424

<210> 3508
<211> 255
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002g05b1

<400> 3508

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gcgtgacgtg ggctaaataa aagtgttgtc ggggccagtc gacgcccagt gtcgggtcag 120

cagcgagcga gcgagcgacg cagcgccact cgccggcacc cgtgtgcctg cgtctgctca 180

gctggagctt tgttgcggtg tgtgtcacag tgtcagttcc acctatgatc gatcggtatc 240

ctatccggtt tgtgt 255

<210> 3509
<211> 53
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316002h09b1

<400> 3509

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<210> 3510
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003b11b1

<400> 3510

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gtaccgctgc cgtggtacca cacc 84

<210> 3511
<211> 58
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003c07b1

<400> 3511

tttttccgga ttggattggt ttgattcccg cgtgccatcg agtggagaca agaagaag 58

<210> 3512
<211> 58
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003c08b1

<400> 3512

ttcttccgga ttggattggt ttgattcccg cgtgccatcg agtggagaca agaagaag 58

<210> 3513
<211> 370
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316003c11b1

<400> 3513

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cccggcgcgc tccttcggcc cggccgtggc ggccggcaac ttctccggcc actgggtgta 120

ctgggtcggg ccactcatcg gcggcggcct cgccgggctc gtctacggcg acgtgttcat 180

cgcctcctac cagccggtcg gccaccagga ctacccgtga agcgcacgga tccgaaccta 240

gcttcctggg ctcttggctc gttgctgttt ccccttgtgt gaatttccct tttcgattnt 300

aatccacctc aaaaatgtaa aaatgtaaga caaccactcg atcttacatg aacggttctg 360

gcgtttttcc 370

<210> 3514
<211> 182
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003f04b1

<400> 3514

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gattgttatt cgatgtttgc ttgtggtgtg gtgaagtcaa taatatctca tcataagaaa 120

taagcacaca tgtttgctaa attttgatca tcccgtgtct gggttattct tgttccattt 180

gc 182

<210> 3515
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003f09b1

<400> 3515

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gcagggcagc gccgccgccc aggtcgccgc cgtggtcgtc ctcggcgtgg cgcctgagaa 180

caaggcgggg cagttcgagg tggccgccgg gcagtccggc gagggctgca gctgcggcga 240

caactgcaag tgcaacccct gcaactgtta agct 274

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<211> 65
<212> DNA
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<223> Clone ID: uC-tsro9316003g04b1

<400> 3516

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gtttg 65

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<211> 222
<212> DNA
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<223> Clone ID: uC-tsro9316003g12b1

<400> 3517

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catcgttatg ttcggttgtt tttgagaatt gctgctgttg tgaacagctt tggtgaactt 180

gataaataag tgagccctga attgtgtctg cagctgcgag tt 222

<210> 3518
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316003h12b1

<400> 3518

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ctaagttgat caatatggta actttgttga accttgtatt tctaatgtta acatgttgaa 120

gcactctgta aataacatgt tattgttcga t 151

<210> 3519
<211> 155
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316004b01b1

<400> 3519

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taggttagct gcagactgta cataaggaaa ttgtttatgt tggttctttt ctccagttct 120

ttacatgaga tccatgtcgg caacagtgga tacag 155

<210> 3520
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316004c02b1

<400> 3520

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tagcttgtat tcaggtatac aagcagtggg ttttcctggt gaacatcgaa cccacaacct 120

acctactatt ttcaataaaa atcatataag aatttgccgt ggggcaactt gc 172

<210> 3521
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316004c11b1

<400> 3521

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atgaggccct cggttgcagg ctagctagat ggtggcttgt ggcgttgtag tattacatat 120

atctgtccaa aaaaatgtac tactgagatt ggagcagtaa ccagagattt catctcatct 180

<210> 3522
<211> 342
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316004h03b1

<400> 3522

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gacatgccca tcagctgcct ggtcattggg agcaggggcc ttggcaagct caagagggtg 120

ctcttgggca gcgtcagcga ttacgtcgtg aacaacgccg actgcccggt caccgttgtc 180

aagccagcga gtaaccatgc ctgatctcat cgtcgcaaat gtctacattt gtttcagttt 240

gctggagtcc tatatatcca ggtggccgca acttattgaa ccatccagtg ttatttgtaa 300

taataattga caattagcct gtggatgatt cccaggttgt gt 342

<210> 3523
<211> 163
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316004h08b1

<400> 3523

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ttactagtga taaattggga tgcgctaaca atgtacataa gta 163

<210> 3524
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316006b06b1

<400> 3524

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ttttgatcca gctcagcagt agttttctgt ctgtgggcaa gttgagaatg cggcctagtg 120

tgttcttgtg aagatgtttc tgcctgtcgc tggtaattat agaaaaatag tgtgtacagc 180

agtaaatgct tcgtagccgt gttaatcctt tctgtagcgg acgactctag actctagtgt 240

aaggtgatac ttagatgtgt gaacacctga cttaatgttc tgtgctcc 288

<210> 3525
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316006c01b1

<400> 3525

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gcaacggcgc agtggagact ttggtgaaga cctctcacca agttatctgc aaggccaata 120

gtaagttgga taacaatgcc aatggcaaca gcaatggaag tggcactggc agtagcagag 180

cttgggaagg gtgggtggag acagtctcta gcacattggc agtgccaagt aacaggaatt 240

ttgtgcttga tgttactggg agggtgacat 270

<210> 3526
<211> 370
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316006e11b1

<400> 3526

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ggagccgcgc tgtccatggt ttacatatct ggatctccgg tcatgtttgt tggatgcggc 120

cagtcctaca ctgacctgaa gaagctgaac gtgaaatcca ttgtgaagac cctactgaag 180

taaaatggta gtgctagtac atgtcgagct ccgatatgtg ccacatacca aaagtctgct 240

atatctccaa atatccccag tgacctcgtt gttttctcgt ttggtgtgaa actgtcgtcc 300

ctagcaaact tttctggttg ctgataactt attctgttat gtggatcgtt atgcttggtt 360

gcctcatcag 370

<210> 3527
<211> 185
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316006f07b1

<400> 3527

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ctggaccgag gggctcttcc tcagtagcaa tgtacccggc cctgtattct tatcttctgt 120

tgcagtttgt ttctctttct tgagagctgt tacttggcca aaaaaaaaaa aaaaatacaa 180

tagat 185

<210> 3528
<211> 223
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316006f11b1

<400> 3528

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aaatatcacc ttgtccactt attgtttgta agagaatgca gctgtgccgc ttgccgtcta 180

taattttgtc aaaaaaaaaa aaaaaaaaaa aaaatattac ttt 223

<210> 3529
<211> 100
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316007f10b1

<400> 3529

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atccaggtta ttgtgcacta aataaatgta ctttaagctt 100

<210> 3530
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316008b04b1

<400> 3530

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gtgcgtctca atgtttcgtt cggccaatga gccgtggaag taacaacatt gtttctttca 180

ccgtaagttt gtaagtgtat aaggcctccc cgtgcatgga aatatacgtg gaatatacat 240

acctgttatt act 253

<210> 3531
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316008b09b1

<400> 3531

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ccgctcctat agtggtatca tcggaatcgc cagaagaaga gaaaagagaa gctgtggcaa 120

gacaaaggta gtgtcgccag gccgccatac ccagtggcgg tggcctggtg cggttgtgtc 180

gcgtctgttt tcggtcggta tttggtggtg tttcgagtaa gtactatgtg tttgtgtcga 240

gtgctgggtg agtggattat aagtgggttc tagattggag ctgttttcgc gtcttattaa 300

gattatatta caacag 316

<210> 3532
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316008e02b1

<400> 3532

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gggaccacac agtctccgcc actcacggag acatggacca gaacactagg gacatcatca 180

tgagggagtt cagatcaggt tcttcacgtg tgctcatcac cactgacctg cttgctcgtg 240

gtattgatgt ccagcaagtg tccctggtca tcaactatga cctcccgacc cagccagaga 300

actacctgca tcgcatcggt cgtagtggtc 330

<210> 3533
<211> 143
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316008f11b1

<400> 3533

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaagggg ggg 143

<210> 3534
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316008g09b1

<400> 3534

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ggtgcagggg ggtctggcct aggaatgtct ggaattcctc cgtctacgca aggcggtggc 180

atcgagagct tggcaaacta caacaagtat cagtttggtg gcttcaaatg agctccatag 240

gagaacattt ctagcacctg gtgtttgttg ctttttgct ggactgcgcc tttgggctct 300

tattatcttt ttattggttt tgtcatctcg ctgttgttga ctgtcacatt gcttataatt 360

gctgcagtat tcaagt 376

<210> 3535
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010c11b1

<400> 3535

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gccatgctgc tgtcgcgcac gcggcctact tccgaccgga tctcgagccc tccggtgaga 180

atagacttga cggcgtcgga gatggaagcg gcgccactcg atgcgcgcgg agggcgaccg 240

ccgccgtgct t 251

<210> 3536
<211> 113
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010d05b1

<400> 3536

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggggggcg ttt 113

<210> 3537
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010e05b1

<400> 3537

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atcggtcagg ctatcagtgt tgcggcatac gtcaagaact ttgacctcat cttccttgat 180

aagtcacatc aggggactcc aaaaaaaatc ttcaagctca cgcatgaagt atctggcact 240

agagaagaag tgctgggtgt gatgcacgag tcggttcacg taggcctttt ccggatccag 300

gaaaaaaagt caaaactctt tcttgcaggc tacaatttca aagaccctga aaacaggaaa 360

ggacgttttc cggtcttcgc gcgggagatg agc 393

<210> 3538
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010e11b1

<400> 3538

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ctagacttgt ttgtcaaatg tgcggaccat tttagtatat ttctatatca gcact 115

<210> 3539
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010g12b1

<400> 3539

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g 61

<210> 3540
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316010h04b1

<400> 3540

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agtcggctcg ttaggtacgt agcctcgggg ctggtgtgtg tcgatgtatc ggttttcggc 120

caattttcct tataaattgg tcaattctct tcttcttaat gcaaaggcag agctcctgct 180

gttttctcg 189

<210> 3541
<211> 241
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316010h11b1

<400> 3541

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gccatggctg ctcgtgcgag cgctttgaat tagtacggtg ctttgacgat ctgtttgaag 180

catgaatggt actgtatttt gctagattgc ggtgatgggt gctttggatt gaacttgttt 240

t 241

<210> 3542
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316014a04b1

<400> 3542

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gaagcagtcg gacgtgatga ggttcgtgca gcgcagggct ctcggctccc aggccatagc 120

agcttggcaa gcctattgag gagaccaagg aagatgtgta cccgaggacc cacaagtcgc 180

ctgccaagat acgcataatt ttgaaatctt tcaataacca gaagaacaat ctgaaggagc 240

ttgcgccata catgcataag gtcgggct 268

<210> 3543
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316014c12b1

<400> 3543

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actaatagg 69

<210> 3544
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316014d02b1

<400> 3544

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tcggcatggc ggcgccggag ctgggcaggt tcggcccggg cttcgacctg tcagcggcgg 120

actacgccgg cgccatgcag cagccgccgc cgcagaagca cgttggaccc aactggttct 180

actgaacaac caaggaggaa ccacccatga ttagcatgta gctctaggcc attagaattc 240

ataaggcttc cattctcgat cagtccatgg cgtcttgcaa cctgtaagga tcggtcaaat 300

tcaggccatg ttgagaacac tggaattttt tcacaaatca caccgaaatc gaagttcttc 360

tttc 364

<210> 3545
<211> 196
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316014h10b1

<400> 3545

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cagttgggga cacaaacctt gttcttcttt ccctatgttc cctacgagtt ctttgtcgaa 120

ctcataggca aaggcatcga tcgatggatt agttagctta aaaaaaaaga acaaatacaa 180

tagatagaag aacaag 196

<210> 3546
<211> 115

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019a08b1

<400> 3546

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ctcttctggt ccttgctacc tatatatttg ctaaataagc aaacatacta ttctt 115

<210> 3547
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019a09b1

<400> 3547

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tgtttctcac ggttccttt ccaacatt 88

<210> 3548
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019d12b1

<400> 3548

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gatttggagg atgtcttgca actgcggatc aggctgcagc tgcggctcag actgcaagtg 120

cgggaagatg taccctgatc tgacggagca gggcagcgcc gccgccgagg tcgccgccgt 180

ggtcgtcctc ggcgtggcgc ctgagaacaa ggcgggacag ctcgaggtgg ccgccgggca 240

gtccggcgag ggctgcagct gcggcgacaa ctgcaagtgc aacccctgca actgttaagc 300

t 301

<210> 3549
<211> 99
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019e02b1

<400> 3549

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cgcgaggaag aaacaacatg tgttatcttt cagtcggtc 99

<210> 3550
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019e10b1

<400> 3550

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aatacacgca gcaatgtatg atacaaaaga atattaagca acggagtaac gcccacgccc 120

cactcagacg aacacaacac aacacaaccc atcactactc gttactactg ctccccctaa 180

actcagaagc gaagtgaccg tcgccgccgg acgagcgacg acgcaccgcc accgccgcca 240

ccaccaccac cagctcaccg cctactgtgc gacgagcagg gacagcacgg cggagcaggc 300

cacggccagc gccgacgcgg cggcccc 327

<210> 3551
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019e11b1

<400> 3551

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atctgttggg aatctacccg cctatgggtt tcctaggaat acagacagac caggtgaatg 120

ccatggatct ttgtttgcgc tgatgcagtt taactggaat agtgggcttt c 171

<210> 3552
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316019f12b1

<400> 3552

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ataggatctt tcaaagttgc gtttacaggg ttcggtagca ttcaaactgg ggtgtgttta 180

tgtcaagcct tcgccaggat tcagtagctc tgaatgtgta ggaaatccca gcagctggaa 240

tgacttgctc acctggcctt gcagaacaca taaaaatgta aaaattgtgt taataaaaaa 300

aaaaaaacaa aataataaac ag 322

<210> 3553
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316023e09b1

<400> 3553

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gagtgcttga gaaccatgag gagggcaggc gctacgccga gcacggtctc agagcctatg 120

tgcaggacaa gacccccgag atcatgccag gaatcaacaa gttcttcacc agcccgaaat 180

gaagcacttt agtctctctg tgactcgcta ttagcaactg ttgtggtcaa gtgcaaacct 240

atttcaagca ttcagtaatg ttgtcgcgtc cataattcag aggatatcat aaagtacctc 300

ttattgaaag aaccatgtga tgtttgatgg ctcgctatat atgtgatggc tgatggcttc 360

<210> 3554
<211> 82
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316023e10b1

<400> 3554

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atgtgagttc tcttgtccac gc 82

<210> 3555
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316023g05b1

<400> 3555

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gttctatttt ctctagca 78

<210> 3556
<211> 209
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316024c03b1

<400> 3556

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tgattcagaa agagatataa cctagcagaa gtgcaacgga agttgttgta ctcggacatc 120

aaaaaggaag atattattgc gttgcgcgtg ttgctaaatt tgtatcgacg agcgtacaaa 180

taatggaaca tatcaaagat tttttgttt 209

<210> 3557
<211> 122
<212> DNA
<213> Triticum aestivum

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<400> 3557

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aacctagcag aagtgcaacg gaagttgttg tactcggaca tcaaaaagga agatattatt 120

gc 122

<210> 3558
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316024c07b1

<400> 3558

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gaccgagcac ttgtattcga gccctcgagg cccctggctt gtattatgat gcttgtatga 180

cttatttaaa aaaaaaaaaa aaaataaaaa aaaaaaaaca aaaaaaaata aaaaacaact 240

aatg 244

<210> 3559
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316024f12b1

<400> 3559

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gcccaggcgg tgccctcgtc gacatgacca cctccgaccc cacactcgcc ggcgagatag 120

cc 122

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<211> 401
<212> DNA
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<223> Clone ID: uC-tsro9316029e07b1

<400> 3560

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aaaggacgtg ccctcgtcca cgggcacatg tggcctcgcc acctcgccct tctaccccac 180

ggcttgacca caggcagcac tatgtgtgat atctaaggaa ttgcttccgt ttcgttgtga 240

taatgctaaa ttactatttt tgttatactt ccctttaatt tgatcaataa tcggtagacc 300

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gttaattgta catttgtgac acatatttac cgatttaacg g 401

<210> 3561
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<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316029f11b1

<400> 3561

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gccgcgccgc cctgccgctg ccgccgccgc tcctgctggg cggcgtggcg aag 173

<210> 3562
<211> 88
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316029g11b1

<400> 3562

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gtacacatat agttgcttct ttagtttc 88

<210> 3563
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316029h10b1

<400> 3563

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gcaatctggg tagaacaagg agcaataaaa tatcagtgcc aaaataaaaa atcaaagaaa 180

aacaatttg 189

<210> 3564
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316030a09b1

<400> 3564

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ttgatattct tgtactgcta gtcatgttct ttgccaccga gaaatttgat cggtggctgt 180

gttggtctct tgacattgta tttcgcaagc aagataggcc ttttccctcg ccttcaatgc 240

tgataaataa actggagccc cacctttcca aataaaaaaa aaaataatgt 290

<210> 3565
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316030d01b1

<400> 3565

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gagtagttca tagtcagaac tttttcgcac ttgaaatcta ccaggctgct gtttcgagat 180

ttgattccgt gttatctgtc aaaccgaatg tcgtgatctg aacatgtttt gtggaatcta 240

tctatcatta atagtttcgc tttaattgta ctgcctt 277

<210> 3566
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316030d04b1

<400> 3566

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accattagta taggccactg gtgcgccatt agtataggcc acggtgc 107

<210> 3567
<211> 175
<212> DNA
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<223> Clone ID: uC-tsro9316030d11b1

<400> 3567

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gagccgcgcc gccctgccgc tgccgccgcc gctcctgctg ggcggcgtgg cgaag 175

<210> 3568
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316030h11b1

<400> 3568

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actcctaggc cttcaatggg agaacatccg tcaaactatc cctatcaaca atccttcact 120

tgacagatcc aataccatca attcacaacc tcctgtattc tctttaccac cattctccca 180

acaacttacc catgacctgt ctactgaaac cagcgaccaa gaagactcct tggccaggaa 240

atccatgaat tctgttgctt cctcgagcgc ttcgtccaca gatgagaaaa attaaacaga 300

gtatttttag agggtagcga gagcaaaaag aaataatgtt attgaaaaag aaatttaata 360

ttac 364

<210> 3569
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316031g12b1

<400> 3569

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acccaaaagg gtatgaacaa ttacaaaatg cgggaacgga agggacgacg gagcagaagc 120

gcgggatacg agaaggaacg aattggcagc ccggactgat tgttggagta aacgtaccta 180

ttgcaagtct gacgcggtgg acggcgagcc gtccgggagc ctggttagac gacgcggttg 240

cgctgtattg tcgatgcgat attgcaactt gtattgtgtt gttgtggtgt tttgcagagc 300

gctg 304

<210> 3570

<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316031h11b1

<400> 3570

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agtgcaaccc ctgcaactgt taagct 86

<210> 3571
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032a09b1

<400> 3571

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tattatgatc gggtaggatg aggatgagat taggttccag ctgaagaatg agaggtggaa 120

gactggtacc atttgtatag cttgtgtgat aaaaagacta agacattttg ggtgtacact 180

cctccgtgtt ggtgttgcca cccgtgaaca taaacactgc ctgtatgtta tatgttacac 240

tttgtgttca gaggtttggg ttttgtacct ggaagaatgc ttttgttgaa cgaacggtgt 300

atttgtatct gt 312

<210> 3572
<211> 164
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032b12b1

<400> 3572

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taagctgttg aacatctaag tgcgtagttt tcgtgcggct gtggtgcatg ttgatgtatg 120

catctttttg tgtccaaatg gaagaatatg cgggtacaag gcat 164

<210> 3573
<211> 334
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032c01b1

<400> 3573

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gcaactggtg tccacccctt tctcatgaag attgtgttct atatctatct atatgtatat 180

tctttgttct tcaagtccat atgtaatcga tttaacgacc acttgcagta tcgtcaggac 240

atagttacag tttgttgtgt atttattcta aactggcaga ataatggttg tccagagctt 300

gtgcagttat gcccaattga gatttttttt tatc 334

<210> 3574
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032d11b1

<400> 3574

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aatgtcacta aactgagttg caat 144

<210> 3575
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032f03b1

<400> 3575

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<210> 3576
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032g12b1

<400> 3576

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atttccgccc agtac 75

<210> 3577
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316032h09b1

<400> 3577

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ttgaaaactt tctgataatt gcgggatttg ctttgtaatg gtaatcgtga aattggtgtg 180

gtt 183

<210> 3578
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033b02b1

<400> 3578

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aggaagcaaa tggcggttac tctgaagctc aggatcctcg ccgtggc 107

<210> 3579
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033c05b1

<400> 3579

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ctgctggtgg tggcgaaata atcgggacct gatttgtact gtgtgccatt agtgagagtt 180

gtgattagtt gcggtggctg ttttgtacgt tgatgatgtc gatatggcat ctccatttgt 240

ggtgg 245

<210> 3580
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033d06b1

<400> 3580

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cggccaacaa cgtgcacggg tggcatcgct cacacgtcaa ctaaacctgc ccagccaaca 120

acatgtcact gctaactaac ctgtaataaa gtacagtaca gagtgagcga gctgcagaca 180

gacgtaaatc aaggttcaga acaaggcctg aacgaaccaa catgcagaga gcgagcagct 240

ctgcagacgg atgtcgattt aggttcagaa taagacctga atgtaaggtg tttcgtt 297

<210> 3581
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033e05b1

<400> 3581

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cacttgttgg atgtgcagac gtgtatttgc tcttgtgagt atgtgactgg atgatttctg 180

gatttaatca gttaattgag agatttattg atttttttc 219

<210> 3582
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033e07b1

<400> 3582

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggaaaaaaaa aaaaaaaaaa 120

aaaaaggggg cggccgtttt aa 142

<210> 3583
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033f06b1

<400> 3583

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tactcacttt gagacgactg tgacagatgt tcttaatatg tacacactga ttactggaaa 120

gactgttgat cttagcgttg atctcagtgc tgccagcgct gcagaagagt actagatctc 180

aaacccagaa ttttcttcaa gacatacttc ctggaggacg aggaacacca ccggaatcct 240

actgtgtgat ggtcacgtgt gacatcagct gcgtactgcg tagggttcca ggtccacgcc 300

tgctaccagc actatgcgaa attattatct ttggaatggt gctgggttcc ttcgttaact 360

tccatattga tccactgggt tgtaaacgtt attctatcat aacgatggct ttgacatgtt 420

aatgttccgc ttgtcgatgt attctacagt tat 453

<210> 3584
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033f07b1

<400> 3584

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tgaggacgga cgaccatgcg tatgagagcc ggaaggagcg ggagcgagag gaggaggaag 120

acaggaaggg agcggccaat gctgtcaggg gtggggaatt catgtacatc tgatatctga 180

aggggaatca ctgtttctgc tagcgagcaa atcgtaatgt gaccaatctt cttatctgct 240

cggtcgtcat gcctgaaatt aagcatgtct tgtgttgttc ccagattcac cgcgtcccta 300

gtttgtcacc agctttatca accccaagtc attagaattt agaaagcttg ccatagttca 360

catcacatat gaaatggata ctcttgggga gcggcaatgc ataact 406

<210> 3585
<211> 321
<212> DNA
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<223> Clone ID: uC-tsro9316033g09b1

<400> 3585

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tgtggatcgt ctgtaagcta ccatgtgcta tcgtatctcc tatgcctatg atatttgcta 180

gtaaacctat cgtgcaacgt gctttctatg tccgtacatt gttaggtggc ttcttattgt 240

gtgcatacaa atgaaccttа tttctgaatg attcttcatt agtttttta tttttatcat 300

ggttgacata agaatgagtg c 321

<210> 3586
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033g10b1

<400> 3586

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gtggatcgtc tgtaagctac catgtgctat cgtatctcct atgcctatga tatttgctag 180

taaacctatc gtgcaacgtg ctttctatgt ccgtacattg ttaggtggct tcttattgtg 240

tgcatacaaa tgaaccttat ttctgaatga ttcttcatta gtttttttat ttttatcatg 300

gttgacataa gaatgagtgc 320

<210> 3587
<211> 276
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316033h05b1

<400> 3587

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gagcggcgcc aagaagatgg aagccgacgc tgcgttgtca gtgcactcct gagctgcatc 120

tcgccattgt caagttatta taggatttgt gttctgttcc gtacaacaat tcttttcaac 180

agtcgatacc accatgtcga agtagccaat tcatccttgt aatatgatgc tagcttatat 240

ataaacaatg aagtgtatct ttggcgtcac ttcacg 276

<210> 3588
<211> 81
<212> DNA
<213> Triticum aestivum

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<400> 3588

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ataaagttac atttttgctg t 81

<210> 3589
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316034e03b1

<400> 3589

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cggccgccgg cacagtgtgc tgcgcacggg caatcgtcgc caccgccgat gtacgcgcct 180

ccaccgccga tgtactgata cgtggcagac ggcaatactg caatttgtaa ctgtttgctg 240

cctttgtgcc gtgagaaagg gtaaaaatgc acacatttgg tatatactgt aatctttatt 300

tttcggaaac aaatgaaata acaatggatt ggt 333

<210> 3590
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316034e04b1

<400> 3590

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gccgccggca cagtgtgctg cgcacgggca atcgtcgcca ccgccgatgt acgcgcctcc 180

accgccgatg tactgatacg tggcagacgg caatactgca atttgtaact gtttgctgcc 240

tttgtgccgt gagaaagggt aaaaatgcac acatttggta tatactggaa tctttatttt 300

tcggaaacaa atgaaataac aatggattgg t 331

<210> 3591
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316034f08b1

<400> 3591

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cttgctttac ttaattatag agtggggaat ctgatgggtg caaaacagta ctgtcggaca 300

attgattcat aattatattg tggttgtaag atattatcta tagtaataaa gttaatagtt 360

gtttccctc 369

<210> 3592
<211> 140
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316034f10b1

<400> 3592

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ttcaatttct aactgaatct 140

<210> 3593
<211> 209
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316034g06b1

<400> 3593

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gcccgaggtt aaactgggca tttgattgga aatcgaggat aatgtaaagc tagcttatat 180

ttcattgtgt taaagtgcaa gtattgcgc 209

<210> 3594
<211> 58
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316039c07b1

<400> 3594

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<210> 3595
<211> 204
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316039f06b1

<400> 3595

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atacgatcct tatctagaca aatctaataa taaataagaa aatttgacga tttcagacta 180

taaaaaaaaa aaaaaaaaaa ttag 204

<210> 3596
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316039f10b1

<400> 3596

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tcagtaactg aaatgaaaat gtttgttatc tgttct 96

<210> 3597
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041a03b1

<400> 3597

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gacatctgcg cctgtattgg tagattttct ggggtagacg gacggcaact tgtactcttc 180

ttgcacaata ttggacttgg tagcattttg ttctgaatgc ttgcgaggaa agcaaataag 240

gtgttttgtt ttgtttgcca gtgtgctgtt ccttgttaga gggtgtaggg atcaggtgtt 300

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atgtaatact aaagaaggga atgccttttt ctac 394

<210> 3598
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041a07b1

<400> 3598

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ggtgaaacgc cacaacaagg tgcaggtcca agtgttgatt cagtggtctg gtttagcagc 180

tgaagcagcc acctgggaag actatgatgt cttgaagaac aggtttccgg acgcaccagc 240

atggg 245

<210> 3599

<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041c01b1

<400> 3599

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ctttttgggt ccacagattt ggaggatgtc ttgcaactgc ggatcaggct gcagctgcgg 120

ctcagactgc aagtgcggga agatgtaccc tgatctgacg gagcagggca gcgccgccgc 180

cgaggtcgcc gccgtggtcg tcctcggcgt ggcgcctgag aacaaggcgg gacagttcga 240

ggtggccgcc gggcagtccg gcgagggctg cagctgcggc gacaactgca agtgcaaccc 300

ctgcaactgt taagct 316

<210> 3600
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041d11b1

<400> 3600

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gggaaccgcc aaaccaacca cggaaaccgg aaaactctcg acccccgttc cctccgatct 120

gccaaaaccc attgttccga gtgaaccgga aaaaaattct cgcggggttc gcgatcccaa 180

ggaccaatcg atgagcgtat ccggcgagtt acgggctcgt ggtgcaggga gatcctctta 240

acgatatatt ttttttgcg ttttcaagga gttcgataag gaactcggtt acttcacgtt 300

tcaaaaccca ctatgtatga cacgcaccgt attaaataac acgtcg 346

<210> 3601
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041f11b1

<400> 3601

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agagctcgaa gggcgctgtg ctcgcaagga tcattaatgt tgttcttgta tgaacgaaac 120

atctgtttga attcggcata aagttaactc tttctttctt ggtcttgttc ccctccgcct 180

tccctccttt ggttcaagtt taagtttgat ggaataagga accagctgtc ttcctatact 240

ctgacgagtg aaatggcaag cttgaagttt 270

<210> 3602
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316041g11b1

<400> 3602

tgttttccca cgcgtccggc ggcgaaaata accatcttag ttattggttt ccatttgata 60

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tcaccaatgt agtggagaaa atgatgaagg tggttgttct gtttttgttt tctattgtca 180

cttgggaatt gctacgagag gaaccatatt actgatatat aatttgcttg ctaccgaaat 240

ttgttttttg atgctacatt tggtatacca cct 273

<210> 3603
<211> 346
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316043c01b1

<400> 3603

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attgtgaaga aggaacacat caagattcat ggtttctgag caactgccag ctccatatca 120

gagtctacat gcaaagcagc tatatattgg tggtgcagta tatttagttg tgtgctagcg 180

ctagcaggcg ttaccagctt gcgcgctctg agtatacaga aaatctagca tagcccacct 240

ctctgcgtgt atgcttgtta ccgntgtgtt gaaactttgt aaggagcacc gtctttagat 300

ggcttgttac cctctcccat caaggttgaa taatatatgc tttgtt 346

<210> 3604
<211> 73

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316043e06b1

<400> 3604

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ctctccggtc atc 73

<210> 3605
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316043e08b1

<400> 3605

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cgagaaggtc gcggccctcc acttgggcaa gctcggcgcc aggcttacca agctcaccaa 120

gtcccagtct gactacatta gcatcccagt tgagggacct tacaagcctg cggcctaccg 180

gtactagtgt gtccagcgcg actagcggct ggcctgagcc tgagtccgtg cagcggcacc 240

aacgggaact ctatcaacta tcctgtttcc cttctattat cttacatgct gtctcttagg 300

cggaggattt gttattatgg ttatgttttg agccgtgtga gggttgggag aggcggcgtt 360

tgcttttgcc cagaaataat ggcattatta tt 392

<210> 3606
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316043e11b1

<400> 3606

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atgtgtgata tctaaggaat tgcttccgtt tcgttgtgat aatgcaaaat tatatttttt 120

tc 122

<210> 3607
<211> 208

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046a01b1

<400> 3607

tttgtcgcgt catcatcagt aagccagttt agtttcattg cgctatcttg tccttgagaa 60

attcagggta aacagtgtgt gcgagtcagt cagtcaggaa taatctcatc cttctcttat 120

cttggtgtat gtatgtacgt cctcaattat gaatgcttct attccatggt caagattgat 180

gtttgcacag aacaacaaaa cactgatg 208

<210> 3608
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046a03b1

<400> 3608

tttcttacgc gtccggagaa aatatcacca actttgagga aaatgatttc cagatcctac 60

gtgtccttat gacagtcatt gacacatcaa ccgacaccac tgctcttgcg gttgcctgct 120

atgacctctc acagttcctt cagtaccacc cttctggccg cttagtggtg gcagacctca 180

aggcgaagga ccgagtcatg aaactcatga accacgacaa tgccgaagtt aggaagaact 240

ccctgctctg tgtgcagagg ctcttcctcg gcgccaagta tgctagcttc ctgcctgatg 300

tgtaaaaaaa aaaaattata cataaaaaat aattat 336

<210> 3609
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046b12b1

<400> 3609

ttgtcttctt tcctttacaa gagaacggca ctctgtttta ttttgtcttg tgggttagga 60

agaagcccac tgaacaatct ttaatttcct ttctaccgaa aaaaacatgg atataaaacat 120

gaagagaggt catggaaagt ttttaattca agtgtttgt 159

<210> 3610
<211> 139
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046d11b1

<400> 3610

tgttttgtat acatatgctt atatgtagca caagttgagt ttttttttact agcaaggcga 60

gataaacttc ttatcgttcg agttgacgcc cacctgtata tacaaccctt gattcaattg 120

catttattgc ttagatggg 139

<210> 3611
<211> 208
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046g12b1

<400> 3611

tgtttttgaa taacgagcgt ctgatctgat ggagtcgagc aagggtgcgt gtgcgtgtgc 60

gtgtggtttg cttgctcgct ctcccatgct ctgcccatgg tgtccttgtg tgtatgtgtg 120

tgtgcatgtg tccctgtaat tgcttcatct atccccacta tggatggagt gatgaatatg 180

taagaatgaa agatttacct aattaact 208

<210> 3612
<211> 298
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316046h03b1

<400> 3612

ttttttatgg ctcagccccc acctcatgga ccagccccgc cggtggcttg acgacgccgt 60

ctgccaggcc tcccacttac tcttcaccag ctaggcggag catctggagt cgatcggata 120

ggaaatgaat cttcttctta gctgttgttt tgtcttatct cccccgctgc tcatagagtc 180

aggattcaag aaaagaaagg gcactgtcga ttggttgaat gatttcaatg tgtgctctcc 240

cgctctctga tgtatcccat gggaatgtgt gttaatcgac atacgcttct taattttc 298

<210> 3613
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047a01b1

<400> 3613

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atactagcaa gtattatact aattagttaa tgtgaagaag gtactct 107

<210> 3614
<211> 285
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047a03b1

<400> 3614

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cttctggttg ctgattaggt ttagattatg tgtagggatt attgtgcatc ttggttgccc 120

ttgctaatta atggttagat ctcgttcccc ccctccgact atcagtcagc cttggatgta 180

tcatatcgtg attccttcct ttatggtaga actggaattt cttggattca aaaaaaaaaa 240

aaaaataata attaaaaaat aaaataaaaa aaagggcgtt ctttg 285

<210> 3615
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047b01b1

<400> 3615

tttcgttccc tatgagaaac gtatcactga gcttcttaag gttggaaagg acaagcgcgc 60

actcaaggtc gccaagagaa agcttggtac tcacaagaga gctaagaaga agagagagga 120

gatgtcaagt gtccttagga agatgaggtc tgctggtggt ggtggtgctg gtgacaagaa 180

gaaatagagc gtggctagtc ggtgaatttt atcccaaaac tctgtcctgt attaccagtc 240

cgtaccttta gagctatcta tggccatagt gttggatttt ggaattaagc ccgtggtttc 300

tattttgaga agaccaatct ttttaagata tttatgtcag attggtgcct ttgttttatt 360

gttacttgct ttgtttgatt acttgatacc cagctgttta ttcggtt 407

<210> 3616
<211> 260
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047b08b1

<400> 3616

ttcccaaagt aagatgctta tatatgttgt ggattgttgt gtgctcgctc taaggatgca 60

aaaataaagg agtgccttgt cattttccaa acaaaagtcc tgggtagatc atagaatagc 120

aaggcggtta tgccttgtta ccttttgata cccgtggaac tttcttttgg aaaaaatagt 180

atgcagatag agtgcttatc atatatgtac tgtgtacaat atcatacacc ataatatcaa 240

gtcatgtatt tgttatccga 260

<210> 3617
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047c12b1

<400> 3617

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gggagagagg cgaccggcgg cggcgcgcga ggaggggcct acccacccat cccaccaccc 120

cgccggcgaa gatgttcggc cgcgccccca agaagagcga caacaccaag tactacgagg 180

tgctcggggt gcccaagaac gccgcccagg acgacctcaa gaaggcctac cgcaaggccg 240

ccatcaagaa ccaccccgac aagggcggag accccgagaa gttcaaggag ctggcacaag 300

cctatgaggt tttgagtgac cctgagaagc gtgagatcta tgatcagtat ggcgaagatg 360

ctctcaagga aggaatgggt ggaggaggag gtggtg 396

<210> 3618
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047f01b1

<400> 3618

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agcaagagtt tgttgacatt gtggagactg tctacagagg agctcgtaag gggcgtggtc 120

tggtgattgc tcccaaggat tactccacaa aataccgtta ctgaggtatc tgtgcctggc 180

tattcatgtg aagtgtgtgg cctgctctgt tccgtgatat gcgctgtgtg acccttgatg 240

taatgtctgt caactttgaa agtgtcgtaa ctatgtattt gtatcttgaa tatcaacatg 300

tcataaacct gtaacccttt aaaacaggac ctgctgtcta ttggtattac tgct 354

<210> 3619
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316047h06b1

<400> 3619

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gtttaggaaa accgccttca agatggggtt aaagggtgta ccaggaattc ggataagaaa 120

atgaataacc aagctacatt ttatctccca ttctgtaatt cgtcttattt ctaattttca 180

ctacatcaag tctgaaactg atcgatgact tgttgactgg ctcaaacgaa gaacgactct 240

cacatttttc ttacggcctt acactc 266

<210> 3620
<211> 126
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316048b07b1

<400> 3620

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg 120

gcggcc 126

<210> 3621
<211> 344

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316048b08b1

<400> 3621

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ggccgtgtcg ccccccggggc cggaggagaa ggcctgcaac ccgtgggcgg actgcgtcgc 120

caagtacccg cccaaggcct acgtctgacg atacattact acgccgccgc cgcatgactc 180

cacacgaaga ttacatgatt cttttctcct atacttttc tgcatttcgt ttcccgtagg 240

tggctgtacc ttaggttcca tgggcgagca gtgccgttgt tttcagcttt tgtactttaa 300

gtgtgaatta taaacgacaa atatatacga cgaggtttca ttcc 344

<210> 3622
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316048f06b1

<400> 3622

tcttggacgc gtggggtaca gcgtagcagg attgttcatg ttcatgaggg cgatgtggtg 60

cacttctgca ctgaagcgcc agtgcgcgag tgtgtatggg actatcatcg gatttctgga 120

tgtaatgtaa ttttacataa ataaacctgg cttgctagtt actctagcgt gaagcatgaa 180

gaggattatg ccctgcttgc aagaattgtc cgtaatgatt catcat 226

<210> 3623
<211> 170
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316048f09b1

<400> 3623

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtgcgaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg gggccgtttt 170

<210> 3624
<211> 134
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316056b06b1

<400> 3624

ttggtgacgt gaaacgatac gcggcaagta gatacgttaa ctctttctgt gtataccacg 60

cattgtctct actctgtagt cttcccctaa cttgatgtaa caacctatat aatcctattc 120

tgtaatcttt ccct 134

<210> 3625
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316056e02b1

<400> 3625

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gggaagatgt accctgatct gacggagcag ggcagcgccg ccgcccaggt cgccgtcgtg 180

gtcgtcctcg gcgtggcgcc tgagaacaag gcggggcagt tcgaggtggc cgccgggcag 240

tccggcgagg gctgcagctg cggcgacaac tgcaagtgca acccctgcaa ctgttaagct 300

<210> 3626
<211> 169
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316056f09b1

<400> 3626

ttgcccacgc gtccgcgtcg atcggtcggt cagtcgagtc agtttgtggt gcgtgcgtgg 60

agctgtaaaa gcgtggatga tctcgatctg ggatgaccga cccagtcaat ttgcttctgt 120

aaaactgtga attcgcccgc ccgagtaatt tcaagttcag ttgagttgg 169

<210> 3627
<211> 216

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057b02b1

<400> 3627

atcaagatta tggcagacat gtcatcggct aaaggagcat gttgatatga cctggtttgc 60

accctgtatg gagctttagt attcgtcagc agaaagaata attaccatac atgtatttcc 120

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atcacaagca ataagccctt tgggcattca agctct 216

<210> 3628
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057b03b1

<400> 3628

cttcaggcat cagtatcttg tgttctcgta tgctgccagg cgcaggcaaa tgctgtcatc 60

cttcgctgca acggtctgat gtttgtgatg aatatctgaa ttggcagcat gccgtggtca 120

tattagcaca agcttgaaac cctggtctag cgcactgatt gtacggccac agaatatgct 180

gtgacaaatg agtaccatgt aaacttaaat cagtatactg taatatatta tttgcttttt 240

gggggggttgg ctgccctgcc taatgatggc gatgacactg cgcttgcaga actctcttct 300

atacataata cactagcttt actgt 325

<210> 3629
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057c04b1

<400> 3629

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ctcccgccac acaggcttag caatctagcg ttagcgcctg cgtccatctc gtagctgctt 120

cgatggcgat caagaggacc aaggccgaga agaagatcgc gtacgaccag aggctctgcc 180

agctgctcga ggagtacacc aaggtgctca ttgtcgtcgc cgacaatgtc agatccaagc 240

agcttcagga gatccgcaag ggtctacgtg gcgactccat cgtgctcatg ggcaagaaca 300

ccctcatccg ccgctgcatc aaggtgcact cggagaagac cggcaacaag gact 354

<210> 3630
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057e02b1

<400> 3630

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agttactagt aagtcgtgta ccaccagcaa gtatgtctgt ggatcgagga ggagtacgta 120

cgtacgtgct agctcccggc cggtcgtgta gaataaacgg tggccaaagt gcatatcaat 180

gtattagcca aaaaaatgct gctaaacttc aatatgaaat aataaagtcc aaggtttaat 240

tcctgttttc ttt 253

<210> 3631
<211> 160
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057e06b1

<400> 3631

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gtgtaagtcc tactgtgtgg ggttactgca ctatctgttg gttgaaaccg ttggtgacgc 120

gtccgtatca ttataagtaa tgaataagtg aacttcagat 160

<210> 3632
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057e11b1

<400> 3632

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tcagtcctac tgcgttggtt tagtgaacta tctgttggtt gaaaccgttg ctggcacatc 120

agtatcatta taagtaatga ataagtgaac ttcagat 157

<210> 3633
<211> 125
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057e12b1

<400> 3633

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tagtaaagct tagctgtagc gactcataat cctcgtagct aatatatgga aagagtacat 120

tattt 125

<210> 3634
<211> 223
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316057g09b1

<400> 3634

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tctcaaaaca tttactatca tagggttgag tttgagttcg agtatgtgcc ctgaatcgtt 180

accgggcaat tttccttaaa tacattgtcc tccaatccga ctg 223

<210> 3635
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061c10b1

<400> 3635

ttctttcgcg gacgcgtggg cggacgcgtg ggcggacgcg tgggcggacg cgtggg 56

<210> 3636
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061d05b1

<400> 3636

ttttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat aaaaaaaaaa agaaagagag 60

gacaagagaa caagaccatg atg 83

<210> 3637
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061e11b1

<400> 3637

gacttggttt ctcttccgaa tgaaaatacc atagcacgct gttgctggta tccttctgta 60

acatgttcta tttcaccctc attaatgact ttgctatttt cc 102

<210> 3638
<211> 291
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061f03b1

<400> 3638

ttgcgcccac gcgtccgtcc acgcgtccgg ccacgcgttc ggccacgcgt gcggccacgc 60

gtccgtgcac gcgtccgcaa agccaaaggc tacgtacgtg gatgggaaga aggaacgtac 120

tatggcgaac ctgtggctgg ggagcattgt tgcgccacat gttgtgttct aattaaccgc 180

ccttcttttt gtggggatgt ataccgaacc taccgattat gcatgcatgt aaattacctt 240

tgtccacgta caaggggagg aaccatggaa taaagaaaga gcaacctgag t 291

<210> 3639
<211> 70
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061g03b1

<400> 3639

tttcccacgc gtccgcccac gcgtccggaa tagcctcttt tatgtagtca ctggtgctcc 60

ttgctctgcc 70

<210> 3640
<211> 167
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316061g04b1

<400> 3640

ctcggaaatg gactctgctt ttctcatttg gccgatcaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gggggccgtt ttagagg 167

<210> 3641
<211> 218
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072b01b1

<400> 3641

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tatgatttta ataagttgaa taagattaat aaattatccc aataacagaa caacttcagg 120

taattaattc tacacaaaaa aaacattaaa ttaaggaaaa aaaatcaaaa taatttaata 180

aaatataaaa taagaaggaa aaaaaaaata atcttttg 218

<210> 3642
<211> 154
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072b11b1

<400> 3642

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ggttacaggg atttacttta gcagtaaaag ggtttactca agaacaaaca gtaccaactg 120

gtgatgacat taataaatct gccctttgtg tttt 154

<210> 3643
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<223> Clone ID: uC-tsro9316072c07b1

<400> 3643

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gtcgagctag gtttgcttaa tttagttggg gtattgtatt tgatctgatt gatgagatta 180

ctaagtcttc cgttgatcct ct 202

<210> 3644
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072e04b1

<400> 3644

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gacctgtgat gaccagagaa gagtgggcat tgtgtgagac gtatttcggc ttcc 114

<210> 3645
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072e09b1

<400> 3645

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taatacttgc caatgaaagc gaaagggcac aaattttcat gtc 103

<210> 3646
<211> 218
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072f04b1

<400> 3646

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agtgaccatc agcgaccagt agttatgcta ccccatgata tgtgtcttta aatctttcta 120

caagggtgga gagacaccag cgtaccaaga tatttttgaa actttctgta gtatgagaac 180

tgggttttgt atgactaggt tctttgcttc gtgattct 218

<210> 3647
<211> 122
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072g04b1

<400> 3647

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ttaaagatgt tctcttgtag agaacatggg atgatgccta cagagagagc atgttggact 120

tt 122

<210> 3648
<211> 134
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316072h05b1

<400> 3648

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ggccaggatg cacgccaaga cggactcgga ggtgacgagc ctggcccccc cgtccccggc 120

gcgctccccg ccgc 134

<210> 3649
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316073b02b1

<400> 3649

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tcgatctggg tttttttc 78

<210> 3650
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316073c08b1

<400> 3650

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ttccggccac tggaccctac ctccggctga accgtttcca gggttggcag gccgttaagc 180

agaaaagata actcttcccg aggcccccgc cggcgtctcc ggacttccta acgtcgccgt 240

caaccgccac atcccggctc gggaaatctt aacccgattc cctttcgggg gatgcgcgtg 300

atcgcgctat ctgccggggt taccccgtcc cttaagatcg gcttacccat gtgcaagtgc 360

cgttcacatg 370

<210> 3651
<211> 246
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074a07b1

<400> 3651

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tgaaccaagc atatgcaaga tttcccctta acatgatgga acaatggagt ctcatcgtta 120

tccgtttttg ttgttagtta ctactattac tgtctagttt ggtgaactgc aacattgtat 180

atgcctattt gatggccagt gtatcagata tcacggtgta aacaccacac ttaaattcat 240

ttaccc 246

<210> 3652
<211> 190
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074a11b1

<400> 3652

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tgtggagctt aagtttgatg tgtggtgtgg gcactgttat gttaattatt atggctctga 120

ttgaaccggt tgtaaagttt gtaagtggat tttgaatttc atagtattat catatcactg 180

ccattgatac 190

<210> 3653
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074b01b1

<400> 3653

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ggtataaaac caaaccgcaa atacttttac cgttgt 96

<210> 3654
<211> 174
<212> DNA
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<223> Clone ID: uC-tsro9316074b07b1

<400> 3654

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aggctaacgc ctaggatgct tcatgcttgg aggagtcaca aatcacaatt gctatgtgct 120

ccatttctgt agtgttcttg cttggatcgg taaataaatt tcactagcgg gttt 174

<210> 3655
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074b09b1

<400> 3655

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aaccacacaa gacagctgcg tatggttcat tatgtagttc tagatctatg tacagcatca 120

tagctcctct gtaccgtgat agagtgatgt ccttatccag accattgtac agaacggagt 180

gtggataggg gtttaggttc ttgatccgct ctccacttat gttgcttctt ttaatcatct 240

gcgctaattc tctccttgtt cgttatcatc agtgttcttg taaaaacaga gctggaaatg 300

cttattcgtg tatatcactt tgtcggtctt cgcatc 336

<210> 3656
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074e09b1

<400> 3656

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tt 62

<210> 3657
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074f08b1

<400> 3657

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tatgccagtg gcgcatgaca agctaacgct gttatggatg taataacacc gtgtcatagt 120

tgggcctaat cgaaaaccat ttgcttgata aaaacacact tgaaatgatt tgcgatggac 180

gaatgtatcc agagcggcat catttctagt tggtggttgt atttgtggtg cgtgttctgg 240

cacgcttcat aacttgctgc ttatagaaca cgctctgttt ctcgttcatc ttcaattgtt 300

tctccaatta aaagtatctg ttgtgatccg agtatgtaag ctctccaaat gataatagtg 360

gctctctgtt tgt 373

<210> 3658
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074g08b1

<400> 3658

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cgccgccgtg gtcgtcctcg gcgtggcgcc tgagaacaag gcgggacagt tcgaggtggc 180

cgccgggcag tccggcgagg gctgcagctg cggcgacaac tgcaagtgca acccctgcaa 240

ctgttaagct 250

<210> 3659
<211> 74
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316074h01b1

<400> 3659

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aggacggagt taat 74

<210> 3660
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075c09b1

<400> 3660

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<210> 3661
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075c11b1

<400> 3661

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ctgccgcctc cgaggtctct gtggactgga ggggcaggcc ttgcaggcct caaaggcatg 120

gaggcatgaa agctgctgtg tttgtcctag ggatccaggc gtttgagatc atggcgattg 180

cggcggtggg gaacaacctc atcacctacg tgttcaacga gatgcacttc ccgctgtcca 240

agtcggccaa catcgtcacc aacttcatcg gcaccatgtt cctcctctcc ctgctcggcg 300

gcttcctctc cgactcctac ctgggcagct tctggaccat gctcatcttc ggcttcgtcg 360

agctctccgt aagccaccgt aaaaccagca aaaaaaagga tcatttcttt tgtttttcta 420

ccaaaactat caaaggcacg ggaaaaaatt catgcaggga aaggctagtg cgtgcgactt 480

taaagtttta ctgactg 497

<210> 3662
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075c12b1

<400> 3662

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gtcctccgtg gaggtgccct ccgggagcac cgcgggggag tgcctcggcc gggtgctggc 180

ctcgttcccc aagctggacg agatccgccg ctccatggtg ctcgcgctca acgaggagta 240

cgcgcccgag tccgcccccg tcgccgacgg ggacgagctc gccatcatcc cgccgatcag 300

cggcggctga ccgaggctga aaatgaagaa aaagggagaa agaaagaaag gtcttcctct 360

ttcttcagta cttgtctttg cttcttgatc aatgggcacg ttgaatcata gtaataaagt 420

tgcgatgttc gctggc 436

<210> 3663
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075d02b1

<400> 3663

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gtattttctc tgacttgagt tgtacaattt tagaagtcgc tgttttaatg tgtaagggtt 180

aaagatggac cggaggtggt tattgatgta gggttcagat gatagtccaa tctgatgcgt 240

tttatttctg gctgttcttt ttaaccacat gtacaataga tcgctgggag catcattgct 300

cctgtattcc ttct 314

<210> 3664
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075e03b1

<400> 3664

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aaagggatgc caggctacta gatgtttctg tgctgggcgt actgtgttgg atacttgacc 180

tgtgaccata gccagtactc tagatattag aaatgacttt ataatttcta tatatgagta 240

aactgcacaa tccgccggaa aagctttttg ggtgtgtcga atagcaacac accacattga 300

tccgttgcgt gttcttccac atcgcaagtg gagctccgag tgcattcttc ctttgtggtg 360

tctctggtgg gatgaacttg atcgacggca catttggcag cttgaacttc gtctgccaca 420

cattcttctt ct 432

<210> 3665
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075e09b1

<400> 3665

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cgggctgact gggatcgcct ttgggggggta ctactacacc atgtgggcag tgggcagtac 180

cgaccagctg caggtcacca tgaacaagtt tgaggacctg atgaagaagg a 231

<210> 3666
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316075g07b1

<400> 3666

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gtgcgggaag atgtaccctg atctgacgga gcagggcagc gccgccgccg aggtcgccgc 180

cgtggtcgtc ctcggcgtgg cgcctgagaa caaggcggga cagttcgagg tggccgccgg 240

gcagtccggc gagggctgca gctgcggcga caactgcaag tgcaacccct gcaactgtta 300

agct 304

<210> 3667
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316076b02b1

<400> 3667

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cagctgcggc tcatactgca tgtgcgggaa gatgtaccct gatctgacag agcagggcag 180

cgccgacgcc caggtcgtcg tcgtggtcgt gctcggcgtg gctcctgaga acaaggcggg 240

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gtgcaacccc tgcaactgtt aagct 325

<210> 3668
<211> 213
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316076c11b1

<400> 3668

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gctcccctac tcgctcgcgt gcctctccgc ccc 213

<210> 3669
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316076d02b1

<400> 3669

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cagaagagaa cctatcctgg ggagctcaga tgcgaagaag aagggccgaa caattgtgac 120

agtgcacctc ttacactctt atgtccacta gccatccgta gcatctaaac tgtcgatatc 180

tttgtgtagc aaaagttaga aaggttattc ttaagaagca tggttaggat cggagtacag 240

ccatggcgct gcttgagtct tgcctggtgt atgctaaacc atactaccat acatggctca 300

caggaaacat atagttcgac taggtgccag gatgtatgtt gaacccaacg gcgtcgctcc 360

tccttgaatc tttacctgat gaaatgtaaa tataatgaga cagaagtaat caaatctagt 420

tgtact 426

<210> 3670
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316076d12b1

<400> 3670

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gcgccggttg cctcgagttg aaggcatgca cgggttgcat gcgcaactac acacttgtgg 120

attgtaactc tagaaacctc tttatcctag tatacgtttt ctgtgtaaca ctcgtgggtg 180

ccgcaacact ttgtgttcga ttaagaagtt tttatcaaga gttgaacatc acaataaaat 240

gaaaatctgg tgtaatggga ca 262

<210> 3671
<211> 286
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316076e09b1

<400> 3671

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gatttgtgtt ctggggagca tattcatttt tacagtggac cgatgatatg ataatacttt 120

actgcccctc ttttggttcc ttgttttgag aatattggtt ggttaaattg tgttgtagtt 180

cctgattaca gtgaggaaag aagaaaaagg gtggcatccc cttgcccccg atgttgtaat 240

gtagaaaaag aatgacttgt cagtaacaat gtgaagtatt tttttc 286

<210> 3672
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077a02b1

<400> 3672

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agccaccgtc tctaataaat atcatatgtg atttggattc ctttgtcaac cgcggcaaga 120

catatatggt gtagcaacat tatgtttatt atcgcttgtt ggagaagtct c 171

<210> 3673
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077a03b1

<400> 3673

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agccaccgtc tctaataaat atcatatgtg atttggattc ctttgtcaac cgcggcaaga 120

catatatgtt gtagcaacat tatgtttatt atcgcttgtt ggagaagtct c 171

<210> 3674
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077a09b1

<400> 3674

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ctgaccgctt gagattagag aatggtattt gttcaactct catgtaaatg agattagctg 120

gggacttgta gatatggtca ttgatctgaa tcggggtgat gaattatttg attctttaca 180

gtttgggtta tgaataaatc gtgaatgtgg attggtcggg tattc 225

<210> 3675
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077b05b1

<400> 3675

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gtccattttt atgctcgttc gtttgaggtt ttcaagtctt attcacacac gcccatgtaa 180

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agattgatcg caattggcag ttacaagatt cactccc 277

<210> 3676
<211> 99
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077f09b1

<400> 3676

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ttgctcaaga ggcaacttgg tttttgaatt attggtttc 99

<210> 3677
<211> 275
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316077g04b1

<400> 3677

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tgttttatct gtaagtgaag tgtgtacttg aagtgctttt tattggctaa gcctaaataa 180

ttaaaaaaat aaaaagaatc ttcccaacca agcaacaaac tctattgata aaaatccatg 240

gtccaagaga aaaaacttga aagaggagct tgatg 275

<210> 3678
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078a03b1

<400> 3678

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cattcctcct ttgagggtgt tcttgtaata ccttttttctg atcaacgaat ttggcagttc 180

tcctgtcaac gttcaaaaaa aaataggacg acaagcggtc tgtggcaacg gactgggcgg 240

tccg 244

<210> 3679
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078a04b1

<400> 3679

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gtcgtcgtct tccccatcag gggccgcgcc tggtgcttcg cccgcccgcg ccccgtccta 180

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ctcaaggacc tctggctcgg ggtctccgcc 270

<210> 3680
<211> 446

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078a06b1

<400> 3680

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tcaggtggca tcccgcatgg tgtcagcgtt ctctcgatgg aggagatatg atgagaccag 180

acaagctctt gctaaggccc agctggagat gatcatctca gccaatggac tctctgaaaa 240

tgtctatgag atagctttga aaagtttggc agcttagttt cctgatgcaa agaaacaatt 300

tggctctgcc agtcggttcg acacttcacc attaccaggg cactgaaagt gtacttaact 360

gaatatattg tactactgta tttggcatat gtaaaataac aggctactgt agtggcaata 420

catttgaatt atggcattat tgtctt 446

<210> 3681
<211> 319
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078a09b1

<400> 3681

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ctccgccccg cccccagctg ccgctccccg tcgccggctc cggcgtcaca gcgggcggcg 180

gcggcagcgg tggcctggag atggcttcgg acgacgagcg gtcagtggca gcggactcgt 240

ggtccgtgcg gagcgagtac gggagcacgc tagacgatga ccagcgctac gccgacgctg 300

ccgatgtgct cgccgcggc 319

<210> 3682
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078b11b1

<400> 3682

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tgcatatctc gatggagtgc gagaacgggc acgttgccgc caacggcgat ggcctgtgcg 180

tggcacagcc ggcgcgggcc gacccgctca actgggggaa ggccgcggag gagctgtccg 240

gaagccactt ggatgcggtg aagcggatgg tcgaggagta ccgtaagccg gtggtgacca 300

tggagggcgc cagcctgacc attgccatgg tcgccgcggt ggctgccggc agcgacacca 360

gggtggagct cgacgagtcc gctc 384

<210> 3683
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078c08b1

<400> 3683

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ccaaagatga gttttctggt gctgatatca aagccatttg tactgaagct ggattgcttg 120

ccttaagaga gcgcaggatg aaggtgacac atgctgactt caagaaggcc aaagagaagg 180

taatgttcaa gaagaaggaa ggtgtaccgg aggggctgta catgtgagac tgttcacccc 240

tctcgccgcc agcattacct cctggttcac atggttgtgt aatactggag gattggagtt 300

tgtgttttgt ttaaaatggt tggagtttta ctttcctgta cttacggttt attcagcaat 360

ccccaactta aaacagccct ccaagcaatg tactgcgacc acttg 405

<210> 3684
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078c10b1

<400> 3684

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<210> 3685
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078d01b1

<400> 3685

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gtgatcc 67

<210> 3686
<211> 191
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078d12b1

<400> 3686

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ccacagttag cgagtatttg gatacactgg tttagaatgt tggtgatctg tatgttgctc 120

ataagtacca acctttttgtt tcaattgaca ttttgaatga cgatgagagt gatgaatgtg 180

ttccaagttc t 191

<210> 3687
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078f05b1

<400> 3687

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<210> 3688
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078g06b1

<400> 3688

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attctgaatt cttagagctt 200

<210> 3689
<211> 186
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316078h06b1

<400> 3689

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tcaggatata atccagggac cataaacatt gataactggg aacttgtatc gttgctggac 120

caaatatttg tcgccctttt gcgcatttgg ttgtatggta tgggtcacca ccacatggtt 180

ctcgtt 186

<210> 3690
<211> 103
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079a02b1

<400> 3690

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ttcgcccgcc ccgcccgagt aatttcaagt tcagttgagt ttg 103

<210> 3691
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079b04b1

<400> 3691

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ggcagagtga agcagtagtt tcaaaactga agatctatca cagtcgcgga caacaaatat 180

cagaagctga actttgaagc ttttatgtaa actgaaattt tctgtatggg agggcaagca 240

atgcttgcca tgatgaaagt ttaacttccc cgcagtagag cattgtatta tgttcgagat 300

cgataagaac gaacgatcga aagagttgta aagtgaatca agtcgtcttt attgatagtg 360

atggatcctt at 372

<210> 3692
<211> 163
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079c07b1

<400> 3692

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tccgcctccc acgcgtctcc gtcgcctcct acgcctccca cgc 163

<210> 3693
<211> 232
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079c11b1

<400> 3693

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tgtgaagtcg tactgtgtct gctgctttaa tggaccatcg agtcctgtgg tttggtgcaa 180

acagttgcag gtacatctgt accgttaagt atgaataagt caactttgaa gt 232

<210> 3694
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f05b1

<400> 3694

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gccaagtttt cttgcgttaa atcttcacaa ataagagaaa agttaacatg ggatgttacg 180

ttatcttgat ttcagtacca tgactactca agtgttgaat ttgtacaact gattgctgag 240

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taaaaaccat actggtcata ctt 323

<210> 3695
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f09b1

<400> 3695

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ggaaaaataa tactcctacc actactgctc catgtacgta tgtatatcgt gttattcatt 180

gtacttgctt gcaaaggagg atcaatatat atatatatat attattact 229

<210> 3696
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f12b1

<400> 3696

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ccgagagcgg gtggccgtcg gacgaaggtt tcggggcgac ggcgcagaac gcgcggacgt 120

ataaccaggg gttgatcaac cacgtcggca acggcacgcc caaacggccc gggccgttgg 180

agacgtacat tttcgccatg ttcaacgaga acctgaagga cggggagaag agcgagaagc 240

attttgggct gttcaatccg gacacctcgc cggcctattc cattactttc tgagtgcgac 300

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gtcaactact cgtgtgtctt 380

<210> 3697
<211> 228

<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316079g12b1

<400> 3697

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tgttgcattc gaaaaatctg acctcgatgt atctaaatag gtagttaccg caaagaactt 120

ctatctccgg agtgtaattc attttgagtg ttattttcgg tggcaggata tttgtgaaaa 180

tttatatttt ataagtctat ttatatttaa taaatgtttt acatgtnt 228

<210> 3698
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079h06b1

<400> 3698

aaaaaaaaaa aaaaaaaaaa aaaaaaagaa gaaaaaaaaa aaaaaaaaaa caagg 55

<210> 3699
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079h12b1

<400> 3699

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catagagctc cttcgagttc gaaggggtca tgggagtagt ttgctcttct ccttttttctt 180

gatcggaggc ctctcataag taactcactg tttgctgtgt agctatggca ttgctgcatt 240

tcttgtaatt tacattctgg tgattgggca gtgccgtgga atcataatgg tcttttt 297

<210> 3700
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c01b1

<400> 3700

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atagtgaaat ccttcggctc agggactgtc ggttaaaaac cacatcggcc tgagcaccct 180

ccgcaatcaa tcgtcatgcg cgctttccac cttaactggc aacctatctt tacctccgtt 240

gtgtatcact acatgtatgt tggacaagaa ctagtttgat actcgaggaa gaatatatat 300

ggctgttatt gattactaca 320

<210> 3701
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a03b2

<400> 3701

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<210> 3702
<211> 139
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a09b2

<400> 3702

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaggggg gggcctttt 139

<210> 3703
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b02b2

<400> 3703

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ctgcgttttt cc 72

<210> 3704
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b05b2

<400> 3704

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acgatgacta gttggtaagc ttgatgtact agcgaatggg tgcagtagcg tctgttgctt 120

gattcaacaa ccgtcagaac ctgacaaact atttgattgg tcttgggttg tatatgatct 180

ggatattatt tggtggggtt tttcattgat aactgttgga tgcgtcactt ctacccctga 240

aactctctgc gaaacctttg agttgtggtc gatttatcaa gttctatcag ataatgttag 300

tgctgtag 308

<210> 3705
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b12b2

<400> 3705

tttaagttct actctcttaa aaaaaaaaaa ggggaaattt aaaaaaaaat aggggtt 57

<210> 3706
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086d04b2

<400> 3706

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ggcgtcgacg acgttccggc gcttcggcgt ggcggc 96

<210> 3707

<211> 132
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e07b2

<400> 3707

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ccttgtcgag gt 132

<210> 3708
<211> 186
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e09b2

<400> 3708

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cgggctgttc acggtgtgtt gtagagttgt gcctttgtaa gatttttct acagtctgta 120

catgagacag ggcagggcag ggtcattgat agttttggac atctctactg cgaactgttc 180

acagcc 186

<210> 3709
<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086g07b2

<400> 3709

ttcgtttttg cccccgttga cagcagtatc atgtagacga gacaaaataa agcaaatcca 60

tggcttgtgt gtgtgatata ctatatcaga ttctgaaaca gattacc 107

<210> 3710
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a07b1

<400> 3710

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tctgttgtgt caagtattca cctgagaagt ctggcttgaa tgttaattag tctgttgcta 120

agtgtgagct tgtgatgaac tggtgcgtgt ttgccatttt ttttctaagc attgctgaga 180

ggccaaactg agctgcaaat atgcagttgc catgaac 217

<210> 3711
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a08b1

<400> 3711

tatggaggtg gctgtcaacg acttcctcca ggccgatgat gcccgtgctg ccatccagca 60

ctccatggat ctgtacgcgg aatacattat gcacagccta aggcagtaga gtgtgtacta 120

ttactatttt tcctttgccc ttcctcctat gatgggatgc aaagaagatc ccctcggaac 180

atttggggtc tgatgaacaa ccaagcgagc ctgtatttct acattcttgc tttgtattag 240

ccatattttc ccattactgt ggcactatgt atctcaaatt tgtattcgag accttgtggt 300

ttggctcgtg tattatcttc agttcttact ggacggacaa taatataaca atttatc 357

<210> 3712
<211> 72
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b08b1

<400> 3712

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ctaccttata tt 72

<210> 3713
<211> 357
<212> DNA
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<223> Clone ID: uC-tsro9316087c04b1

<400> 3713

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ctcgctgatt accatcccaa ggatgcgcga ccgactggcg gagcagggca ccagtgataa 180

gttcaccgat ttggtcgact caccgttccc ttcctctgtc cacgcaatgc cgctcgttgt 240

tgttaggttg ttaattcatc aagcccctta ttgcgctaca tagtttgttc atctcgcatg 300

ccttcttagg agaaatcatg taatgaagat aagctattct tgatttacat tttattt 357

<210> 3714
<211> 348
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087c07b1

<400> 3714

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acccacaagg cgagctccgg cgggatggag atggcggcgg agaacggcgg ctgcggctgc 120

acccagtgca agtgcggcac cagctgcggc tgctcctgct gcagctgcta gatcattgat 180

catgcatgcg ccgcgtgcat catatctatg atctatctac catctactac catgtaacgc 240

tgcctgatcg agggtctttg tatgtatgta cgcacctgcc tgcatgagca gagcgggtgc 300

catgccatgc atgtaaaccc ctaaataaaa tctcccgtgg ttntgctt 348

<210> 3715
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f02b1

<400> 3715

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gaagctatca aggatggggt tgatgtgctc tcactctccc tcgcccctgt ctgtttttta 180

tgttaaattc agtcgagaca tgtctgtaac tagtagggtt tccatgtctg taaaataatt 240

caagtttgga catgtagcat ccattcctct ataactctgt tactttg 287

<210> 3716
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f03b1

<400> 3716

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caaaaccata tttttgaaca taaacacctt cttcacctct gatggagagt tatccttgaa 120

gttgcgagag tcgcgctgga tgcaataagt taagcctttg ctttgcatcc attctccgct 180

cttgcgttgg gagctcggga gagtttagtc atgtcttgat aatctgagag tggacatgta 240

gttcatcctg tatcggctgg ttaatttttc ttccacctta cttgggaagg aagctgtaga 300

tactcagata gaataattat caatattctc ggt 333

<210> 3717
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f05b1

<400> 3717

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cctggcattt gccttatttc caccttcccg tatattgttt caacggtggc agtatgtatg 180

tatgttcaac tatgtttcct gagccggtag tttatgacaa gaggcagacc gtaaactcgg 240

aacct 245

<210> 3718
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087g02b1

<400> 3718

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agcactacta ccacatcacc tgcatacagc actggctccg gcagaagaac tggtgcccca 180

tctgcaaatc cgtcgccgcc aagaccgtct agcactagca ctagcagccc ctgcttgttt 240

agtgtaaaca gattctcctg aaatgtctag acacaagatt tgtattcttt tttctactct 300

ctagaatgaa acatttgttt gtgccttcaa gacttcttgg cttccttcag ttcacaaggt 360

tcagtgaaca aagaaaaagg gaacagg 387

<210> 3719
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087h04b1

<400> 3719

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gtggtggaag gctgctggcc tgcatttcgt ctcgccctgg acagtgtggc agagctgatg 120

ggtacatcct ggagggcaag gagctggagt tctacatgag gaagctccag aagaagaagg 180

gcaagggtgc cacagcttag gctgaagagc tgctgcatgt tactcgttgg attttcttag 240

atgttgcgtc catgtcatgt ttgcagacat actgaacacc attttctgta aacggttcga 300

gtcctaggtt gaactgagaa tgttttgcct gttttggttg tgttgtgatc taaagctatc 360

cagattcttt t 371

<210> 3720
<211> 218
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087h05b1

<400> 3720

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atgtctccgg cacatttgtg aggtcctggg cagtgcttgc tggttcttgc cagcggcatt 180

tgttgttgcc tctgaataaa cgcctgccca tattgttc 218

<210> 3721
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087h10b1

<400> 3721

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tgaggatgcc gatgatgagg acaaggatga caaggctggg tctgatgtcg agtctgatga 180

cgagaagcac gatgagctct agatggatgg tgaggatgag aggaggccgc ctgccttcgc 240

gccggtgcca tgatttatta gttgtctctc attatgatgt tccccttttt gtgatcagaa 300

acttgacaag ttactgtgtg tagaagaaca acatcaccgt ggggtctttg tagcgctttt 360

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tcttgcact 429

<210> 3722
<211> 181
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c08b1

<400> 3722

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acgtcttgtg tgggtttgta atgttctagt atcatatcat attgattctg aactcgggca 180

c 181

<210> 3723
<211> 80
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090b11b1

<400> 3723

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ggatcaggtc aggcttgccc 80

<210> 3724
<211> 301
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 3724

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ctacctccgg ctgaaccgtt tccagggttg gcaggccgtt aagcagaaaa gataactctt 120

cccgaggccc ccgccggcgt atccggactt cctaacgtcg ccgtcaaccg ccacatcccg 180

gctcgggaaa tcttaacccg attccctttc gggggatgcg cgtgatcgcg ctatctgccg 240

gggttacccc gtcccttaag atcggcttac ccatgtgcaa gtgccgttca catggaacct 300

t 301

<210> 3725
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a01b1

<400> 3725

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g 61

<210> 3726
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a08b1

<400> 3726

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tctgaagaat ctgattggtg aggccaattg tcaaatctgc caggaaagct tcagcaccac 120

tgcaaatgcg ctcactgaag ctattgatgt atacagcgaa tggatcgatg agtgcgagcg 180

tgtcaacact gttgaagatg acgatggtgc atgagcaagt gtaactataa tactctatga 240

tctcaacgtg ttgatgtcat ttactgccac cgtcagccat atctgtagta gcattgtaac 300

aatgtactgg ctgacttaaa cgttagtagg cagtttgtcc cgtgcttaat acacaaccga 360

tgatattgtg tacctgtatt tgtaaacctt ggtatagcgg ctgagattac acct 414

<210> 3727
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a09b1

<400> 3727

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ccttccgctc ccacccacaa ccctagctcc cccgaatcca tggatccaac caaatccagc 120

accccaccgc cggcccccgt cctgggcgcg cccgtcggct acccgccggg tgcgtaccct 180

cctccgccgg gcgccccc 198

<210> 3728
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091d04b1

<400> 3728

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ttgagtactg tctcagaaca atatttcttg tgtaatggtg tgcgtttttt tcattcgtat 180

gatccagata tatagataga catgtcagat tgatctgatg gccttaccga atgcatattt 240

tctcggggtt ccctttttttg gat 263

<210> 3729
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091e10b1

<400> 3729

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cctcgtcgcg gccgtcatcg ccctggtgtt catgctcctc tgcaccccgc cgaagcggcg 180

ctccgtcacc atctacccgt gctgttgagg ctgaggagtc tccaaggatc tctggttgct 240

gggaggaagg ttattcggtt gttcatggga gagagcaggc caggcaatgg tccctggttt 300

tcttcggttc agaaaataat ttctactact gaattgtagg gctcgtcgaa actgtaagcc 360

atgttttatc ggtatattat taggctgtcc atctccatct gtagcatgaa ctgatacatc 420

tggggaaaat agatatcatc agactctgta tgttgttttc 460

<210> 3730
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092a04b1

<400> 3730

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aacagcctag caagtcaaag aagagcaaac gtaagcataa tgatggtgca cctgccgtag 120

aggtttctgc tggcgatcaa atcgtgacaa gggaagataa gaagagaagg aaggaaccag 180

ttgtgctgga agcgagcaac caaacccaaa acacaaatga aggtgagaat agagagatta 240

agaagagagg aaaggaaagc agtaaagcca gttcagactt tagtgagaat gcatctgctg 300

ggggagagga agctggttta ggtgttaata atgataagaa gaaaaagaag agcaagggga 360

ttggaggagg 370

<210> 3731
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b05b1

<400> 3731

cttggatgcg tccatggcgg cgacaaggct caggaggttg ctgacggact cacttggtgg 60

ccatggtgtc taagtaaact aattggtcaa gtattaagct cggctggaag atctgcagaa 120

gaccaagggg atggctggct gcgtctttgt tcttcttaac ataaacttaa attgtcaccc 180

gcaaaaaaaa aacttaaatt gtaccttggt acattgtaat atcatacagt atgcatgcat 240

aaacactttt aatttttt 257

<210> 3732
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b10b1

<400> 3732

gggatatatt tgtttatttc ttctagcgcc tagccgagag aagagtggag gaacagagca 60

gaattggtgt ccggttctgt cagtacatat cacacacagg tttcgcttga tttattatac 120

ctactaagta ttagtgctgt ttggctgtga catgtccaca aatcagcatt ggtgccatcc 180

<210> 3733
<211> 99
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092d04b1

<400> 3733

tctgtggtcg aggaggtgaa ggaggaggcg gcgcctgctg ccgagccaga agtggcggcc 60

gtcgccgagg aaacaccggc tgcagcggag gaggcccca 99

<210> 3734
<211> 247
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092e06b1

<400> 3734

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cttgctcatc cgcgtgcagc atctctctag cttcccccta gagagatctc acagccgaat 120

aagcagcagc aagaacccct ccggccctcc tcccagcacc accaggaacc aagtcaagtc 180

gccaatggcc ggtctcagga tgaagttcgt cgccgtcgcc gccatggccg ccgcgctcgt 240

cgcctcc 247

<210> 3735
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092f05b1

<400> 3735

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gccctccgtc ctctccgagc gcctcaggat caacggctcg ctcgctcgca gggccatcaa 120

ggacctgatg gagaggggcc tcatcaggat ggtgtcaatc cactccagcc agcagatctt 180

caccagggcc acaaacacct gatttacctc atgtgttggc tgcctgtttt ctagtccagt 240

agactgagat gtcgctgtta tattgacgtt cattatgttc agcgaggcac tttggcactt 300

cgtgccacaa gtatgttgaa ttgcttttga gtttttggta caatctaaga cgcaatgaaa 360

tctaccttat att 373

<210> 3736
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092f08b1

<400> 3736

tgaaatacca caccttcatc tcaaagctga aagtggaagg ctactcaacg gaacgacttc 60

tgtcgcattc gattgtatgg aaggctcatt gggtttatgg tcccttggat gagaagacca 120

agtaggagga aagagctgga gatggccata tccacttgac taagtagttg gttatgctag 180

tggtaaattt tgtgagaagg tgcatgcgaa ctgctgtgta aacggagatc accaaatcat 240

atcaaagttg aaacggacat ac 262

<210> 3737
<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g09b1

<400> 3737

tgtctgaact gctaagtgtt atgtagttcc tttccggttg aattgttatt ccctgtcgag 60

gacgaaatga aaatttggtt gcccac 86

<210> 3738
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093c02b1

<400> 3738

ccataaactc ttttttatac tgggtttttg ctcttatgta gacaatatta tgtgacctgg 60

aacttatcat ctttttgtct gtaatgtaac acctgaagtt tagctttgat tcagtgtaac 120

atgatgcaca cgtacgttat tgtgtttttg t 151

<210> 3739
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093c07b1

<400> 3739

tctgttgatg aagccatgat cttaattgct ggtgcgggtt cgtcgcgaaa taagccgagg 60

tgtgtgcccc ccgatgtgtg cctgtacgag tgtgtgttct tgtgatgtct cctcgtgttg 120

aatgttcagg cttgtgcttg cgatcctgtc tcatctttta ctgaaatgag cgttcctatg 180

ctctggttta ataataaatt gtgcctagat attatctcag cttc 224

<210> 3740
<211> 315
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093d02b1

<400> 3740

cccacgcgtc cggggagctc tcaaggtgcc tggaactgat catgggtgac agggtggagg 60

gcgccgccat acgggcgagc tcggcgacgt ggaaggcgaa gttgcagcaa gcgattgcgg 120

ccggcggctc gtccggtcgt aatctgagga ctttcctgga ccaatttgcg aatgatgctt 180

agaagcattt atgtactatg cgtcctcgtt ttgttctact aaaatagcct tgtttccgta 240

tgatattctc ccactaaaat gagcaactca gctcctgtaa aaaccttccg tccatggaat 300

agtatatttt aggag 315

<210> 3741
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093d03b1

<400> 3741

cgtgacgcgt gggttcttgt ccgagtgact acatcagact atcaaggatt gttatttgtt 60

atgtaccaat gtggagtcac ataggttatt tgtgcctgta gagtaagaat tatattaatg 120

tgatggactc ctgtc 135

<210> 3742
<211> 231
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093d10b1

<400> 3742

tcgctcagat tgggtttgag agtgtgtgtt gtgcctgtcc gtgcttggct tctgaatttt 60

cttctcagct gtaattctcc ctatgaatgt tcttgattgg gtttgacggg tttggccata 120

cacctcatgt ttggtctgtt ttttgggggc tcgtctagtc tctagggcat gtaaaatggt 180

tctattttaa gaatgtcacg taggataaat gatgagatga tctcttagca c 231

<210> 3743
<211> 114

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093e11b1

<400> 3743

tcgcaccttt gctcaaatgt tttgtatgtg gacctggaaa gtattcacca tgtaaatgaa 60

ctaacatttc aattgtgctt cgatgaggcg caaacttgtg ttcaaacatg tctt 114

<210> 3744
<211> 83
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093f01b1

<400> 3744

cccacgtgtc cgcccacgcg tccgcccacg cgtgcgtggc gctcgagcga tctgaaaaga 60

tctgctgtcg agccagttcc tcc 83

<210> 3745
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093f04b1

<400> 3745

ctgtcgcgtg ggcggacgcg tgggcgggtt cggccagaca cttccgccgc cgccgccgac 60

gacgcgaaaa ggagagcgag gccgactccg ccgccgcgat gagggccaag tggaagaaga 120

agaggatgag gaggctcaag aggaagcgcc gaaagatgag gcagcgatcc aagtaggcgc 180

cttggagcag cggaagcatc atcctacatc caggctgcca ggcaccgagg gatgacggca 240

tggtctagtg attcctggcg tgtttgctgc tatggctgtg gaagctgttt aacctgtgtt 300

atgtccaatt tagctgttta attctagtct ggttatgttc caagacagag ttttatgtaa 360

tgtggggatt atatgtgttt gtgactgaat tttatgcacc tattaatttt gcggcgtc 418

<210> 3746
<211> 105
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093g11b1

<400> 3746

tcgcggacgc gtgggctttt ccgacttctt tggtggcccg ccattgtata cattctttct 60

tcgagctcat gtatgattac tttcatttgt atgcatagtg tatgt 105

<210> 3747
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094a09b2

<400> 3747

cttttatcta atattcttgt taatatgcta gttaagattg gatactgtgc tacttggtgc 60

tgcccatcac ggcatgatcg ttgccatcaa gaacatcgat ggcaagagct tgaataacaa 120

cctcgatagt ttatatgttc tgttgatgta aaatggattg tactggttca taactctgtt 180

gtgtgatata ttttgtcaat ctatgttgta tgtcatcact ttgtagagga ttttttaaac 240

tgctgtgttg tagatacata cagatggctg tgttaaactt tgtaatgttt cacaccttgc 300

aaatattttt tgttggg 317

<210> 3748
<211> 185
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094c04b2

<400> 3748

cttcattcta tgaagctttt ggccttactg tcattgaggc catgacatgt ggtctgccga 60

caattgcgac atgccacggt ggccctgctg aaatcattgt gaatggggtg tctggtctgc 120

acattgatcc ttaccacagt gacaaggccg cagatatctt ggtcaacttc tttgagaagt 180

gcagc 185

<210> 3749
<211> 119
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094c06b2

<400> 3749

atctctgcac actttcatga atttgatgca atcgaagtga cttgtgttga tgctaatttg 60

agctttgcgt ttggtcttac catattggtt ggtttcttta ccatccttcg acttactgt 119

<210> 3750
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094c09b2

<400> 3750

cccacgcgtc cgagatgttt tcacaatgat ctgtcccgtc cgtcgtccat gaaagcgcaa 60

gctgttggtt ggtggttgca tttcccccag aaaggacctg gtactcggaa gaagtaggcc 120

tctaaagatg tgagcctgtc tgtgtcggtg ccgtctgtcc gtaatctcgg tgatgtgtat 180

gttcttcttc atatttatgt atttgtagtg cagtatgccc gccgccagcg gggaaacccc 240

gaaagacggg ggatactgtt gtgatgcatc aggaacgccc caaagtgagg gtggatgatg 300

ttgggagtgt atcttgctgt ctctgtacct taccttggtt tggaaagttg gaaccttgca 360

tttgacttg 369

<210> 3751
<211> 360
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094e02b2

<400> 3751

gagataattg ctgagaggca ccagttacct atccaggatt ttgttgttcg caacgacatg 60

gcttgtgggt caacaatcgg gccaatactg gctagcggtg ttggtattcg tactgtggat 120

atcggagcgc cacaattgtc catgcacagc atcagggaga tgtgcgccgt tgacgacgtc 180

aactactcat atgaacatct caaggcatat tttgaagaat tcactgaatt ggataacaaa 240

gtcaaagtag actgctgagg tgtagtagac gaccatataa ttgggtcagc agaacctgta 300

cttctacaat cacaactaca atgcataata attagtaatg tcagattatg tatgttngtg 360

<210> 3752
<211> 146
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094f05b2

<400> 3752

gcttaagaaa tgagtccggc tacccacagc tggctagaaa agtcagcggc cggctgtcca 60

aaaaaaagag aagaggctga ctgcctgcta gctgactggt aaaaaagaga gaagtcaagg 120

gctgtgtgcc cagccagctg gctaag 146

<210> 3753
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094g05b2

<400> 3753

gatgtaaacc aacagaggtg tggtgcacct gcccggggaa gctttggagc tggtcgagag 60

cgtcatgtta tgctgtactt aggcttacct aatggcgtcc ctctttcagc gggatcctca 120

acgcgtaatt ccccatgttg acagtagctc gtactggtcc tccatcacct gcaacgtcaa 180

aataatcaac actgtaggta cttgggcttt acctaatgac gtttcaatgg caatttcggc 240

gctccgctgc tg 252

<210> 3754
<211> 240
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095a02b1

<400> 3754

gttccatatc agagtctaca tgcaaagcag ctgtatattg gtggtgcagt atatttagtt 60

gtgtgctagc gcaagcaggc gttaccagct tgcgcgctct gagtatacgg aaaatctagc 120

atagcccacc tctctgcgtg tatgcttgtt acccttgtgt tgaaactttg taaggagcac 180

catcgttaga tggcttgtta ccctctccca tcaaggttga ataataatat atgctttctt 240

<210> 3755
<211> 310
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b11b1

<400> 3755

tgcttacgcg tgggcgcgcg cggacgagga gctggctgtg tcagcgtcca cggcggcagc 60

cgtgtgctcc tacgtggcac ggcgtgatgc tcagtcagcc agtggagtgg actggagtgg 120

agtgctactt tttactacta ggtgtggggt gctttgcgcg gggtccgcgt gacgtgggct 180

aaataaaagt gttgtcgggt cgacgcccag tcccaagtgt cggtcagcag agagcgagag 240

acgcagtgcc agtgtgccac tctagataat gtatgcttct tttctcgaca agacatgctt 300

cattatttct 310

<210> 3756
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095c02b1

<400> 3756

ctgatctttt ggtgtagccg tttagactcc ggaattcaac aaccctgtgc cgcgggctgc 60

gcttgtttca tgaacctatg cattgccgtg ttctcccgtg ttccaagcgg ggaggagaca 120

gatcattcgc ctt 133

<210> 3757
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095c07b1

<400> 3757

tttgtaaaaa taagaaataa aaattaaaaa aaaaaataaa aaaagaaaaa aatctaaaaa 60

acacacgaag aaaaagaaaa gttataaaac taaataataa aaaaataaga caaaagaaaa 120

tagaataacg gat 133

<210> 3758
<211> 130
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095d09b1

<400> 3758

ttggttaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaat aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg gcggccgttt 120

tagaggaccc 130

<210> 3759
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e01b1

<400> 3759

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aagaatctga ttggtgaggc taactgtcaa atctgccagg aaagcttcag caccactgca 120

aatgcgctga ctgaacctat tgatgtatac agcgaatgga tcgatgagtg cgagcgcgtc 180

aacactgttg aagatgatga tggtgcatga gcatgtgtaa ctataatact cgtatggcct 240

caatgtgttg atgtcattta ctgccaccgt cagccatatc tgtagtagca ttgtaacaat 300

gtactggccg atcgaaacgt tagtaggcag tttgtcccgt gcttaataca caaccgatga 360

tattgtgtac ctgtatttgt aaaccttgat atagcggctg agattacacc taatctcggt 420

acctgcaaaa gaattatact t 441

<210> 3760
<211> 93
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e07b1

<400> 3760

tctgtaatgc tatgtggctc ttatgggcct ttatctatat gagtttgagt tatgttgtga 60

tgccatgttg tacaacacat actatggtaa gac 93

<210> 3761
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095f02b1

<400> 3761

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agcccaagcc gatgccaaaa ccaaagccca acccctgctc caaaccaaag ccaggtccta 180

agcccgagcc aatgccgaaa cccgaaccaa agccggagcc caagcctaaa cctgaaccga 240

aaccgaagcc gcctcctaag tgcaaaccac cgacagctca cagttgatgg gatactctat 300

atacgacagt tcatggagga gaccccatac gaagccacac tatgctattt ctagaataag 360

tggtgtaata ttccctgtat tccagttatt tctattgttc catgcatgtg tgatgagtat 420

tagtactctg tatttttttt tgcttggtgg tatatgttca tctactttgg t 471

<210> 3762
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g11b1

<400> 3762

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gcgtccgtgt gcgcgtttct tatgttcatc tactggttgt caaagtagta ggatgttggc 120

cgcagcgaaa aggcgtcata gtgttgtaag tttggatcac agtgccggta cagataatga 180

tatgattggt gtttgtacaa tattgattca atgctatatt acttttt 228

<210> 3763
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h02b1

<400> 3763

cctttgcttc cgaaaaaaaa aaaaaaaaaa aaaaaaaaga aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg 120

gccttttttaa aggat 135

<210> 3764
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h05b1

<400> 3764

aatacattta ctctatcttt tcctccgggc ctgtgtgtga tgccctgccg taaatgttct 60

gaacctatgt attggaaggt cacatataag aatctgtatt tgttgtccta aaacctgctt 120

agtagtttgt gcg 133

<210> 3765
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h10b1

<400> 3765

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cagatttgga ggatgtcttg caactgcgga tcaggctgca gctgcggctc agactgcaag 120

tgcgggaaga tgtaccctga tctgacggag cagggcagcg ccgccgccga ggtcgccgcc 180

gtggtcgtcc tcggcgtggc gcctgagaac aaggcgggac agttcgaggt ggccgccggg 240

cagtccggcg agggctgcag ctgcggcgac aactgcaagt gcaacccctg caactgttaa 300

gct 303

<210> 3766
<211> 248
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096b07b1

<400> 3766

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aacggcatga acgccgcctg cgggttcttg cacgccgtcg acaccccgtt cttgaaccgg 120

tccgggtcga accggtcaac cgtcgggccc caagaagcgg cgtcgtggtg catggaggat 180

accggcacga agaggtcggt gcccttgggc gcgagcagct ggcccagcca aatgtcgcgg 240

aaccgcga 248

<210> 3767
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096d02b1

<400> 3767

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atcctatccc cacgctgctc ctattccctt tccttgctag tgttccttta ctgaagaaaa 120

caacctgctg gtgttcttta cctgttgctg atcctgtact tctctgaatc ccaaactgct 180

gcttctctct ctctttttct tgcaaaaata ttgtacgatg ccttgtaaga attggcgaac 240

tgtccagtat taaagcggtt tagtaatatt ctgttgatat gcgagtacta gtttagtggc 300

tcgcgtaatt tcgtttgtgt tgtcactcgt gtaacctgaa ccttggtgta gtaccttgtg 360

cccatatgtg tggctatgtg tgtactgtag ttccaacgtc aactatgctc atgtgaaaat 420

atatatgttt gtgctgcgat 440

<210> 3768
<211> 491
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316096d11b1

<400> 3768

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gccggccatg gcgctcctca ccgatctcct caacctcgac ctcaccgact ccacggagaa 120

gatcatcgcc gagtacatat ggatcggcgg atctggcatg gatctcagga gcaaggccag 180

gaccctcccc ggcccggtca ccgatcccag caagctgccc aagtggaact acgacggctc 240

cagcaccggc caggcccccg gcgaggacag cgaggtcatc ctgtacccac aggccatctt 300

caaggacccg ttcaggaagg gcaacaacat ccttgtcatg tgcgattgct acaccccagc 360

tggagtgcca atccccacta acaagagata caacgctgct aagatctttа gcaaccctga 420

tgttgccaag gaggagccat ggtacggtat tgagcaggag tacaccctnc tacagaagga 480

catcaactgg c 491

<210> 3769
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096e05b1

<400> 3769

gttaaccgat tgtggctctg gccgtgtgcg tgcataggga tgcaaatttg tagcgttctg 60

gggtgcctgt gacccttagt tcaactggat gaagt 95

<210> 3770
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096e11b1

<400> 3770

tcgcgaggtg ttgtgaactc aagtttatgt actatgtatc gtctatcagt tatagctagt 60

gatagtctac ttagcacatg tcacttatga cttgcgatgg ttaaactttt ttctttttg 120

cgatggttaa actatagtag tgtttaccgc tc 152

<210> 3771
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f03b1

<400> 3771

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tgtaaccgcc gccgtgtcct tgcacccgtt tcttttattt ttctggccag ttctttcctc 180

tttttcttcc ttggtctttt tccggaccct tctctgtaca tggtcgctgc ggtaaaggtt 240

agccgagtct ggttacttgc gaattgcttt tagtaagaaa aacttttatt 290

<210> 3772
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f10b1

<400> 3772

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ggctcagact gcaagtgcgg gaagatgtac cctgatctga cggagcaggg cagcgccgcc 180

gcccaggtcg ccgccgtggt cgtcctcggc gtggcgcctg agaacaaggc ggggcagttc 240

gaggtggccg ccgggcagtc cggcgagggc tgcagctgcg gcgacaactg caagtgcaac 300

ccctgcaact gttaagct 318

<210> 3773
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f11b1

<400> 3773

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caacgaggac atgaagcccg gccccacctc cgagcgcaac tacggcctct accagcccga 180

cggccggatg gtctacaacg tcggcctcgc ccagcagcag accacgtcgg cggcctccct 240

ctccctcgcc gcctcctccg cgccccccgc catggatgtt ggaaaggact tgacgagcct 300

gtgcctcatc tcagctctgg ccatcctgct cacctcccag gctttcttac tgggatagca 360

aaagcaccca agagtgcggc catatgcatg caagcaaaat ggccttgact tttgtggacc 420

aaaagccttg cagaccaaag ggcagagatg gtgcaccatt tgaaggggc acaaggaaag 480

catatgcggt g 491

<210> 3774
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f12b1

<400> 3774

tttatttttt gagctaaaaa aaaaaaaaaa aaaaagggaa aaaataaaaa aaaaaaaggg 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacag 95

<210> 3775
<211> 124
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g02b1

<400> 3775

ccctcgcttc cggataaatt gagaccaagt ttgtaaggct ggcaaggtta aggagctgcg 60

ctgcccagcc accatgaata atctgaacgt ggtgtaactt ttcatccaac aatttttcta 120

ctac 124

<210> 3776
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g05b1

<400> 3776

gtttactggc gccgagctcg ctctggcgga gcaccagggg aagtacttcg ccggcatcgc 60

taagaagctc aagtccgtct gaaatctgat ttactacacc gtaattcatg caatgcagtg 120

caaagatgaa ctcgtcatat atgtatggag caggatttac acaattctgt aacacgttcc 180

cgttcctttc cactcttgtt taataataat aataatactc cctcc 225

<210> 3777
<211> 158
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g10b1

<400> 3777

tctgcctagg ttttcggtcg ccgccggtga aactgggtag tagcggctcg cgtctggtct 60

cttctgtgtg ttggtgttga tatgctgtgt cgtcttgtcc tatgtagcct gatgctggaa 120

tgaaatggca atgaaaggtt cagttatcat ctggtgct 158

<210> 3778
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g12b1

<400> 3778

tttctttatg ctggttggtg acgtcccatg ggagaggttc accgagtctt gccggaggat 60

cagggtcatg aaaagttcag atgtgattgg acttggagtt acaagggcag gggtcaagtc 120

caagaataag aactaagacg gtcgctgccc acggtttgaa gacgaggtcg cacatatcgt 180

ctgtactact gcatggtttt cctatcccgc aagtaaaatc acccgttact ctactgttta 240

agatttgcga tatctcctag agacttatgc tctatatttt gttgtgccca cgttgttgta 300

cgcgtgttat ttccatccgt gtaaatggtt ggtatgcagt gcgagagcta ctgctgtgtt 360

tgatgacccc tatgtatttt gccactcttg tcctgaaccg gtcgttcgtc gtaaatgtga 420

aggttgcaag actattattt acctgacgaa ctttgcttgg gc 462

<210> 3779
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h09b1

<400> 3779

tctcctacgc gtccggtagg gtttccagtt gcaaggggcg ccgccgccgc cgccgccatg 60

ggacactcga acgtctggaa ctcgcacccc aagaactacg gccccggatc gagggtttgc 120

cgtgtctgcg gcaactcgca tggcctgatc cgcaagtacg ggctgatgtg ctgcaggcag 180

tgcttccgca gcaacgccaa ggacattggc ttcatcaagg tatgcgacgc cacactgtcc 240

atggatttcc taaatttgat ggccgccgag taatactata ccgttaagaa tggaaacctc 300

aaaggaagca aggactagga aattatcaac gaactgtggt gcttcatcga ggctgatctt 360

tatcctataa gctatgtaat gaactgctat tatgtttgaa tcctggtgac aaaaccgtga 420

aacatagtta gtgactgctg tttg 444

<210> 3780
<211> 211
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097a11b1

<400> 3780

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cgcctatgat cgagcacttg tattccagcc ctcgaggccc ctggcttgca ttatgatgct 180

tgtatgactt attttatttg caaagtgtgt t 211

<210> 3781
<211> 135
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097c10b1

<400> 3781

tttcttcatc ggacgaatgg atggtcgcat tctgtatgta gctagctgcc agtttgtgtt 60

ctgaagatgt tatctcgtga gaatcaaatt gcatcgcctg tcggcctgaa gaaatagtaa 120

tgttcctttc agtgt 135

<210> 3782
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097e03b1

<400> 3782

gtttaatcca aggaggaggc catggctgac tacatcacca aggtgaagca gctgctggag 60

gaggctgccg ccgcatctgc ttgatcccag gccacaaaac cgcaatcgct attgttatcc 120

tggtggtgca gccatatgtg ccagcaaaca caaataagtt tcaagtacta gttgttgtca 180

agcttatcgc cgccgtgggt gtaattacgt tgaacaagcc ctgtgataca tgaaagtgca 240

atctcagttt acaccatgat tgattaatac tcctacatgt cttctgttgt taagatgttt 300

tttttctttg gggaatccct gttcctgat 329

<210> 3783
<211> 288
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097e11b1

<400> 3783

tctctgctgg gatcatggac catgaggagg caaggcgtaa gaatgttggt ggcaaggtgc 60

taggcttttt ctactgaaaa tggaaaatgg aaaattcgat gaaagtatct gagatgtgtt 120

agtaggatat ttcccaagga acacctaagt tgtctttttt tgtctgacta gctgccgctg 180

cttgttgagt tattctggaa tccgttatgc actttcggat tgggtgcctt tgtttgaaaa 240

ctatgagctg tgcctgtcgt taattctgaa aaatccatat gcaatatt 288

<210> 3784
<211> 183
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a02b1

<400> 3784

tgcatcagta taggcatctg tgcttgtgag ggggcatcca ttactcccgg cactcttata 60

tgaagaatct gcagaggatg cagtagcagg taggtgtagg cttctgtatt ttgcagagaa 120

tgcagtatat gtggaatcta gcttttccaa gcatgatgaa tttaattttg ttttctttat 180

tat 183

<210> 3785
<211> 103
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a04b1

<400> 3785

tctattcgtc cgaaaaaaaa aaaaaaaaaa agggggattt aaaaaaaaaa agaggtgaaa 60

aaaaaaaaaa acaaaaaaaa aaaaaaaaag ggggggccgt ttt 103

<210> 3786
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b03b1

<400> 3786

tgcttttgac aatcgaaccg gagattctcg tggtttctgc catgttgatt tcgaggacga 60

tgaatcgctc gagaaagctg ttgggatgaa tcaatctgaa ctgcggggaa gacctgtgaa 120

gatagcgtat gctatcatca acagggcttg aaggctggct agctggtgct caacatttcg 180

cattattgag ctagtgagat tcagttgtaa ggtcttgccc ccttcactgt ttccattatg 240

tttctataga ccaaacatgc catatattgg ccagaagtaa tgatcgtgta acaaatactt 300

ttgggctgca tcttatcaat ctatcttaaa aatcatgctg ctcgttgttc tgtc 354

<210> 3787
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098c08b1

<400> 3787

tgttagaagc acacaggaag ctcctagcca acaccaatca aagcctccat ccaatcccaa 60

gcaacctcga agatgtcttg ctgcggagga agctgcggct gcggcagcgc ctgcaagtgc 120

ggcaacggct gcggcggctg caacatgtac ccggaggtcg aggccgccgg cgccaccctc 180

ctcgtctccg ccactgccac ccacaaggcg agctccggcg ggatggagat ggcggcggag 240

aacggcggct gcggctgcac ccagtgcaag tgcggcacca gctgcggctg ctcctgctgc 300

agctgctaga tcattgatca tgcatgcgcc gcgtgcatca tatctatgat ctatctacca 360

tctactacca tgtaacgctg cctgatcgag ggtctttgta tgtatgtacg cacctgcctg 420

catgagcaga gcgggtgcca tgccatgcat gtaaacccct aaataaaatc tcccgtggtt 480

ttgctt 486

<210> 3788
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d07b1

<400> 3788

tcgtcggctc aatgcctcct tggaactcca ccctgtttaa cttcttcctc ctgattcctt 60

ccactctaaa ttaatttagg gtctgggtgt gtagttttta tggtgggtgt gacggatctt 120

ggggagg 127

<210> 3789
<211> 128
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098f03b1

<400> 3789

atattaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaagggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggggg 120

ccgtttta 128

<210> 3790
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098f11b1

<400> 3790

ttttgaataa cgaaacctcc ccagcggctg aatctcggaa cctgtcttcg gtgaactcag 60

ttcagtgttc agtcgcagca agaaagaagc gaataatagc attccgtagt ttagggttgc 120

ctcctggccc tggacaatgg gtggtttgtt gtacttctgc atcgggctag gaaatctact 180

accaattgtt atcagactat tgtctgtact cctctaagat ctgtacatat gctatcttag 240

gaacttcctg gtgtgagata agttaaggag cacaatttat catgtgctgc tggtaatgca 300

agtgtgttct aaaccttaat aacaagtgga ttctctt 337

<210> 3791
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098h09b1

<400> 3791

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gacggccatg ctaaggaaaa aaagtctagt gcaaagaaac atagctgtat cctatatgtg 120

aactctgatc attccgtatt gacattgaga tatatccttg attcgtcaaa gcaagtgatt 180

gtaatggatt aaa 193

<210> 3792
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099a08b1

<400> 3792

atcacttgtc cggcacacag tgccagtaat ctacgagaag tatgaagatc agattgatac 60

ctatggcgag aaggggtgga ttgag 85

<210> 3793
<211> 106
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099b04b1

<400> 3793

tgtgcttgat cgcaagctat ctattttcct tcatctaaat cttgatggtt ggttttgccc 60

ttcaaaaaaa aaaaaataaa aagtaaaaaa aacaaacaaa agtaat 106

<210> 3794
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099b11b1

<400> 3794

tcgtttcaac ctccacaagc gcctccatgg ctgtaccttc aagaagaagg cacctaatgc 60

catcaaagag ctcaggaagt ttgcacagaa ggctatgggc acaacagacg tcaggatcga 120

cgtgaagctc aacaagctca tctggagcag tgggatcaga agcgtgcccc gtagggttcg 180

cgtgaggatt gcccgcagga ggaacgacga ggaggacgcc aaggaggagc tctactcact 240

cgtcactgtt gccgaggtgc ctgctgaggg tttgaagggg ctgggaacca aggttgtcga 300

tgacactgag tagaatcttt ctttatctac atcgttagaa tgagctgtta ttttgcattg 360

caccagcatg ttttttgtat cccatggaag ttttggagta tggaatatcg caagctatct 420

attttccttc atct 434

<210> 3795
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099c05b1

<400> 3795

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gatgtcttgc aactgtggat ccggttgcag ctgcggctca gactgcaagt gcgggaagat 120

gtaccctgat ctgacggagc agggcagcgc cgccgcccag gtcgccgccg tggtcgtcct 180

cggcgtggcg cctgagaaca aggcggggca gttcgaggtg gccgccgggc agtccggcga 240

gggctgcagc tgcggcgaca actgcaagtg caacccctgc aactgttaag ct 292

<210> 3796
<211> 195
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099c09b1

<400> 3796

ttcgctccca tattactcac tcccctcctc ccccatcctc ccatcgactc gcaagccctc 60

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gtcttcttcg cctctgcgtc ggcgcaggac ttcatggcgc ctttctcagc ccccgctccg 180

gtgcctgacg ccggc 195

<210> 3797
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099f06b1

<400> 3797

gttggtgaag gggagcgaga acccccgcag ctactacaag tgcaccttcc ccaactgccc 60

caccaagaag aaggtggaga cctccctgga gggccagatc accgagatcg tctacaaggg 120

cacgcacaac cacgccaagc cgctcaacac gcgcaggggc tccggcggcg gc 172

<210> 3798
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099g02b1

<400> 3798

ctggatcaag gcgctggatg cctcattatc tgggaggatc agaagacaga ggccatcttc 60

cctgctacac tagaaaccat ttcaaatgtc ggaaaggttg tggacagtct ttacatgagg 120

tcggataaga tcatggcttg aaagttgcta agcatgtgat aggctgtttg gtatgggttc 180

agcctttca gttcctttgc tttctttaag acatgtaatc ctgcatattg gcacttgatt 240

ttgcatgttg gtcgttatat tggatcatag aaaaatacat cttgctc 287

<210> 3799
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099h09b1

<400> 3799

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ctgataagct tggcctgcac tcccttcgcc agcgacactg gtacatccag agcacttgtg 120

ctacaacagg ggagggactg tatgaaggcc tggactggct gtccagcaac attgccagca 180

agccctaaat tttcgtcaag attttgaagg agctaggagc gctttggatg gacgattgaa 240

tcaccgggta cctagggatt gtgttgggag ggatggtgct atgctattcc cgtatgtact 300

gtgtattttc ctgagatcaa cagttactga gccagctccg gctgaggttt cactgtcata 360

ctattgtttt attgtattcg agccctaaga tgtttgcgaa gcaaacagct aaagagagtc 420

ctggtcaatt t 431

<210> 3800
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100a09b1

<400> 3800

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ctcgtctcgg ctcggctcgc ctcgcctcgc ctcgcccact agcccgcacg tccgtccagg 120

cgacgatgcc gccgatggcg accacgacgg cgacggcggc tgcggccgac tccgcggcgc 180

gccgcttcgc ctcggcctgc ggcgtgctca gccagtacgt cagggcgtcc ggcgtctcgg 240

cgcccggcgt gctgggggcc gccctccagg agcccggctc gccggcggac ggggcgcagg 300

agctgaccat cttctacggg 320

<210> 3801
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100a10b1

<400> 3801

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ggtgggcgtg cctccagaag cgcacggagg tgaagctcca ggacctcccc gtggtgctgg 120

gcgcctgctg cgtcctgcac aacatctgcg agatgcgccg tgaggagctc gagccggagg 180

tcccgtttgc gcttgtcgac gacgatacca cgccggagac ccctgttcgc tccgagaccg 240

ccaagcagga gagggacagc atcgcgcaca accttcttca ccgaggtttc gccggcacca 300

catttttctg atcaaatcac ctcct 325

<210> 3802
<211> 94
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100a12b1

<400> 3802

tatcgataag catgcgtcta aatcatgctg atatatagag ttgtaatatg aaagacttgg 60

aggtgaaatg caaatttcat tcttgtcttg cctc 94

<210> 3803
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100f02b1

<400> 3803

ttcacgcgtt tgcccacgcg tccgctcctc ttcgtcctgc aagcagcgcc gccgcctttc 60

accggtccga gctccagcct tcccttcaac catggctgac gttgatgtcg accccgaggt 120

<210> 3804
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100g08b1

<400> 3804

ttcatgacgg atctgggcag ggactgggac atcgactacg aactcctcgt caagctcacc 60

atcgacctcc ccatcatcgg caacttcacc atcccgctcg aaaccgccgg cgagttcaag 120

ctgcccaccc tcagcgactt cttcggcggc gccgccaaga ccgaggaggc caccgcctag 180

ccataagctc gatctagctc gcagcttgct ctgcatccgc atgcctgtac tctaccgttg 240

ccgcaataat gagagcaaat attttcggat ttctttc 277

<210> 3805
<211> 179
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316100h06b1

<400> 3805

ttcacgcgtt cgcccacgcg tccggtttgt ctgtgctaca catatagtgg tggttcatat 60

ctgaggtctg gcaaatagat tggatccgtc aaacatgggc tcattgcacc ctaaggatat 120

acacaatgtg ataatgtatc ggatttactt ccccttttaat ctgcatgctg tttaggatc 179

<210> 3806
<211> 159
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316101b11b1

<400> 3806

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ctgtcagcga gcccccgacg gagcaaaagc gccgccagct tggcttctga gctctgacct 120

cgcttctcac ccacccccgca cctacctacc ccgtacatt 159

<210> 3807
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<212> DNA
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<223> Clone ID: uC-tsro9316101c05b1

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ccgggagcgt acgcgtgcga cgacccgtcc aaccactgga gctgggacgg catccacctc 180

acggaggcct cctacggcca catcgccagg ggctggctct acgggccctt cgccgaccca 240

cccatcgtcg gcaaccggaa cctcgagtag tactgtagca gcagtggtac agggcttgtt 300

tttgcgtaca tgccacctgc acatgggttt tactactgta tgtagagaaa gaaaggaaaa 360

caagtcaaag aacacacatg ccttgtgcag attaattgat tgctaatt 408

<210> 3808
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<212> DNA
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<223> Clone ID: uC-tsro9316101c12b1

<400> 3808

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aacaacgagg agaaagctga accttgtatc attgcaccag tatgctggga tgatagggtg 180

ttctggttcc tgatatgtct gggttgctgt gatatttggg tgatgccaac ccttgtaaca 240

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tatttttgat tt 312

<210> 3809
<211> 117
<212> DNA
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<223> Clone ID: uC-tsro9316101d03b1

<400> 3809

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gtctcaccag tgttgttaag ctacttgtct gtacaattcc ttcctaaagt ttcgctt 117

<210> 3810
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<212> DNA
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<223> Clone ID: uC-tsro9316101e10b1

<400> 3810

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ggcggccctg gggctctgga ccttcgacga cgactgcctc gtcgacgagt gcagcctgtc 180

gttctagatc ttgttccgtg tgcgtccgtt catgtcatga gatgcggtgg tgtaaataga 240

gtagcttgcc ttgtgatgaa atccgttcgt ccgtcgtcgc ttcttggatc agcaagcgat 300

gatggattct gtgtaagagt ttggcatcgt cgtgaaagat tttgcctacg ccttcgatgc 360

<210> 3811
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<212> DNA
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<223> Clone ID: uC-tsro9316101g05b1

<400> 3811

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<210> 3812
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<212> DNA
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<223> Clone ID: uC-tsro9316102h11b1

<400> 3812

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tattttgtat ttcagcatgt aagctcggtt ctagctagtt atgttttcca gatgttgcct 120

tcataatgag tagcagtgga agactcggta ggcgtctgaa aactgaaact gcgtcgcagg 180

ttttgggcag gctgcaaaac tctattgtgg gagtc 215

<210> 3813
<211> 294
<212> DNA
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<223> Clone ID: uC-tsro9316102h12b1

<400> 3813

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atgaacgcgc cccgctacgc cgtagccgcg gccaagttgc tcgccaagca cttgccggta 180

gcgccttccg agccgccggc tcgcgagcgt ggcttggaga cgatagagcg cgccatgcag 240

gcgcgcgctt ttcgtcgtcg tcgccgactc ctgctcggcg gcggaggctt cggt 294

<210> 3814
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103a07b1

<400> 3814

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actgcagacg gaaacggcca aaggagagcg gcgtggggcg gagcgggggg cgatggggaa 120

gtacatgcgc aagtgcaggg cggaggacgt cgcggtgggc ggcgtggagg tcacgcaggc 180

cgtcggcgtc cggacgcggt ccc 203

<210> 3815
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103b07b1

<400> 3815

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agatcgccaa ggccccggtg ctcctgaaga aggcggtgac catgtgcaag agcaagaccg 180

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gcgtgatgtc tcacaagata cacgcgctca t 271

<210> 3816
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103d01b1

<400> 3816

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ttatttttttc ctggaatgct gtaattgtgt cttggtgtgg atgctgcgct gcgttggcgg 180

gattattggt ggccgaataa tattggctgg gtgtagggca ggagttcttc ctggaattaa 240

tatgctgtga ttgtgtctcg agtaacattt tgctcttt 278

<210> 3817
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103e08b1

<400> 3817

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aaagatgctt acatatgttg tggattgttg tgtgctcgct ctaaggatgc ataaataaag 180

gagcgccttg tcattttcca aagagaagtc ctgggtagat catagaatag caaggcggtt 240

atgtcttgtt accttatgat gatacctacg gaactttctt ttggaaaaaa tagtatgcat 300

ttagagtgct tttcatatgc agctacagcg atttccatat gtgtaccgtg tacaatatca 360

tataccataa gataagatca caccttgt 388

<210> 3818
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103g09b1

<400> 3818

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cttggcgtgt cagttgcccc ttggatacat gaccattatt ctttcatatc agagtggacc 180

atgcttgctt gcattatcat tgaaaattga gtccccatcg gtggtcgagg gatagccatg 240

tttgaaccag tcttttcctt cttggagtga gaaatagccg agttccctat ttttagggtg 300

gaagcactca tattcatgtt ctggttacgc ttactgtcaa tcttatcata ttggttaata 360

catcttgaac aattgatctt ctgcaagatt ggggttgctc tttatgac 408

<210> 3819
<211> 146
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103g12b1

<400> 3819

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attcttcatc tccgtgtatc gattgtatcc ctacatatgt atatggtgta catgcatgta 120

atacgtaatg gtgtacattt tgcttc 146

<210> 3820
<211> 351
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316103h11b1

<400> 3820

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tctgcccggc aagtgcggtc tcaccatgcc caacaactgc tcgtgatgat tggttcagat 120

gtactaccca tgagcatcta ggagtcggtt gctctacatc tgcatcaaca cttatatatg 180

gctaaataag tggagaagca cttgaaaaag cattgtccta ctcggtctta ttgttattgt 240

gtaatttgaa agtgtgatta tctcattaag ctcttgataa aatagtatat gcatgttaag 300

tgtaaggatg gcaaacgcgt cttgcatgtt gtcccatgaa attaatatct t 351

<210> 3821
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104b10b1

<400> 3821

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cttataaata agcatttttt ttct 84

<210> 3822
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104d06b1

<400> 3822

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agccgtccgc ggtcgtcgac gacgcgacaa cctcgtcccc ggcggtgacc accgtcgcgc 120

gcgtgtgcca ggtcaggatc cgagtcaaga tctggaagtg gaccttctag tgacgactca 180

aactcccagg gggcacattg tgaaagcgaa ccaaagccac tttacttttc acctgggacg 240

cgtcggtagt agagatcaca accgactgtt gctgtaaaaa aatatcccat ttgaatttta 300

cgaaattt 308

<210> 3823
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104d08b1

<400> 3823

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gttcgttggc aagagtatgg cactgaaatt gttctctggc tccctccccc cacgcaacgc 120

gcccgcgcgc gccgggggggt gggg 144

<210> 3824
<211> 140
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104g11b1

<400> 3824

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cagaagctgt aataaactta aaaaatggta ctgtactaga aggaataatc ggcacaacga 120

tataaatgtg ggtgtttact 140

<210> 3825
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104g12b1

<400> 3825

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taatgtgtga cctaaggcat tgttgccagt atttcaacag tgaagatacg ctctttggtt 180

gtatatatat tgaagttgat c 201

<210> 3826
<211> 101
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316104h08b1

<400> 3826

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aaaaaaaaaa aaaaaaaaca aaagaaaaaa aaatgaaaaa t 101

<210> 3827
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316105b05b1

<400> 3827

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gaccagacct tccacgtgtg taatggtaca tttacgtcga tgaacggaga ggaatcacct 180

ttattaaaaa aaaagttata gtagtttatg ctgaaaaaaa aaaaaaaaaa aatgaaacta 240

cataagtaaa aaaaaaaaaa aagaaataaa agg 273

<210> 3828
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316105d06b1

<400> 3828

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caacggcaag aaggtcatgg ccgcctgcaa ggtgcccgtg ccatcatgct agatcgacgc 120

atatatgatc gatccacacg agagagccca gcgcgcacgc gctcctctct ggcctctcgc 180

tgcatgtttc atgtgtgttg atgtgtcagt gtttgcttgt ttcccaacac tgtctagcta 240

ccctgacgat gtacgtggac cgatgtgtat ctgaatttac gcaataatga cgaagtttcc 300

agct 304

<210> 3829
<211> 92
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316105d08b1

<400> 3829

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aaaaaaaaaa aaaaaaaaaa aaaaaagggg cg 92

<210> 3830
<211> 79
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316105e02b1

<400> 3830

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aaaaaaaact gaacaaaaa 79

<210> 3831
<211> 132

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316105g07b1

<400> 3831

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agtgagaaca agaaaaagaa gaagagcaag gagaccgagg agacccctgc agccaacacc 120

gacggcgaga ag 132

<210> 3832
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316106e01b1

<400> 3832

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ctagatctct gggggcctcc aagtcgtccg cccgcgaggg ggaagcgagg ggaagatggg 120

cgccatgggg ttcgtcgagg gcggtatcga ctgcatggtc gcctgctgct ccacccaccc 180

gctcgacctc atcaaggccc ggatgcagct gccgggggag tcctcc 226

<210> 3833
<211> 94
<212> DNA
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<223> Clone ID: uC-tsro9316109b01b1

<400> 3833

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ctattttcta tataccccac acaagttcat atct 94

<210> 3834
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316109h09b1

<400> 3834

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tcaatgcttg aatagtcatt actcatcgat tcaagtcatt ttggttatgt cgccattatc 120

tgtcatgctt tcatcctgaa cagaacgagc ttttactgca caatcgcata ttattgtcaa 180

aaatgcaatc gattctgtag atgctgatgt tatctaagtg gggctcacaa taaaggacat 240

atagaaccgt tattcccatc tgatgattgt gtcatgtcta accagcagct tttacatttg 300

aatggagatg cttatagttt gctcgttt 328

<210> 3835
<211> 167
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316110c11b1

<400> 3835

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acattgtgtt tgttgattaa tttgctcccg tcaatcgatc gtcctaaatc tcgcaagatg 120

gtcatctgat gctcacataa atcaagtgtt cgacattatt taaggat 167

<210> 3836
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316110d11b1

<400> 3836

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atatatcatg caaaatgtgc tcacccaatg aagatactat tatttttgca cctccagtct 120

ctgcacctag aactagaagg cagacaaaag ccttggtgta tcactgaaat ttctggagaa 180

agaacattag atgtcttaga cgtagcaggt tctttgactg tttgacactt ccaagaccaa 240

agttgtgctg gttaaggaat aaatgatgta ctacatgagg ttggcctgtg ttgagttttg 300

cataacattt gttcatc 317

<210> 3837
<211> 196

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316110e10b1

<400> 3837

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tttaggctca ccctcccgtt gcaatgtaca ttcaagtgta cagtcagttt ctgttaactg 180

taggttcctt gtgtcg 196

<210> 3838
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316113a05b1

<400> 3838

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ccgccgcgat gagggccaag tggaagaaga agaggatgag gaggctcaag aggaagcgcc 120

gaaagatgag gcaacgatcc aagtaggcgc cttggaagga ggggaagcat catcttgcat 180

ccaggctgcc aggcaccgag ggatgacggc atggtctagt gattcctggc gtgtttgctg 240

cgatggctgt ggaagctgtt taacctgtgt tctgtccaat ttagctgttt aatgcctagt 300

ctggttatat tccaagactg agttttatgt aatgtgagga ttatatgtgt ttgtgactga 360

attttatgca gctattaatt ttgcagtact ctg 393

<210> 3839
<211> 150
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316113e10b1

<400> 3839

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ggtgcttgag tgagcgtgtt tttatgcatt 150

<210> 3840
<211> 252
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316113g10b1

<400> 3840

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agaaaaagaa tgccgaacaa acaaaagagg ccagagccag caacgcccat caaaccaccg 120

cctatttctc aaaggaaaaa ctctctgccc tcagccatcc aatcagaagc agcagcgatc 180

catctactgc atcatcgccg ccgcgagaag ggacaccagt gccgaggaga ccagggccaa 240

agcggacacg ct 252

<210> 3841
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316113h05b1

<400> 3841

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cagatcaggt ggagctacag cgcccgctgg cagccggtct tccacaccat ggcgttgccc 120

cttctggccg aatggcggcc gtgtatttcc tcccagccta agagcgatag gggaggcaga 180

tgcatcttct atctggagtt cgaagcggtt ccaagctgct gcgatggtct cgtcgcccca 240

agtggtgcgt ccccggcgac ggcgagtcta catccaggaa gaagatgttc tggacccgat 300

tgcaattttc agatccagtt tagggtcctt cttgtcaaaa tcaagggctt aggtgttatt 360

ttccttttat gtgagtcctt gtgtgggctt tgtgttgtaa ccgctgaagt tttaatgaag 420

atctaggccc ttcatggcct ttcctgttc 449

<210> 3842
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114a01b1

<400> 3842

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tcgagggctc gaatacaaga gctcgatcat agacgagtca gcggaagcaa caatatctga 120

gtacagacat aagttaaaca agtttgcctt aagaaggcta gcacaaactg ggacacagat 180

cgaaagaggc gcaggcctcc tgcctgggat cctcctaaac tactcctggt cgtcgtcagc 240

gggcagcacg tagtagtagg cacctccggt gtagtaggag tcgtcgtcga cggtggcgtc 300

tggatcctgg gctccatcat cggaccctgt aggtgtgcaa tagtgtgcgc gaggaggagt 360

cggggaggcg ccggagctcg a 381

<210> 3843
<211> 89
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114a10b1

<400> 3843

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ccctattgtt cccaaattgt cattcttct 89

<210> 3844
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114b03b1

<400> 3844

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tctaaatctt cctgaggcag gtgatggcgg tgggcgcaca atatatctac agttttctgt 180

tgccgtgatg gtgtcgtagc taaagcaagc ataacatatc tgccctgtga ggtttttgga 240

ccttagatcg agttgattcg tagtattact actgagtgtt atttgcttcg tatgaaatga 300

gacaatgtgg ttggattcct gttgctattc tcttctgtct gccgtcttca tcgg 354

<210> 3845
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114c07b1

<400> 3845

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ttgaatccgc atgccactcc tttcgtgcct gccttcaagt ctccgtttgc ggaaagcttg 180

agaggaaaga aggaccctga gaagcaagta gatgagactg aaaagaatga gactgctgac 240

aagtctgccg ggtatcaact cccagagtcc ctttcttttg atgactatgc tgaaagccta 300

ggaaagatca acatctctac tgagtcatca tcaaaaggag aaggtgctga ggcaagtcac 360

gcgggtaacc atctcgccgt ggtggaatct ctctcgctga tgttcccaga tgtgtctgct 420

gacttcattc ttg 433

<210> 3846
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114e03b1

<400> 3846

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tggggcactt gcgattgatg aaggtgtgaa gtataaggag gaaaaggcgg cagagagggt 120

gggagagaag gtggctcctg ccgcaaggga cgattacagc gagtatcgtc gagagtattg 180

atgggagttc atgtgggtga ggatgcgctg tgagtcggtt cttctcaact cctgttaatg 240

tgggaataag ttgcagtgtg attttgtggt ttgctctgta tatgtatata tttgcttgag 300

agacatgaat tactatggtg cttgtgctta tggcctgcgc atatttacat atttggtctg 360

taccataaac gttttgtgat tacctttgaa gctgtacccg caacttgatg tctgcat 417

<210> 3847
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114e06b1

<400> 3847

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aatgtcccct gccagaagga acttggcaga aatggcgaag acagtgaact cccggagcaa 120

tcagaccttt tggtaaaaga gtgaaagggt agcaatcctg catgagaaga tccctggtat 180

ttttgcccgc aaacatcttc atgagtgcca gcgaagttat tcactgtttg ccatgaagga 240

cacagttacg caggggggac aatcctttga tatgtatcgt tcatgttatc tgtagctttc 300

taatggatta ggtagagcgt ggttggcatc tacatcaaaa cttgtctttt gtttacctca 360

agttctagtt ggatttcaca ccctgtttta tacatagata aataccattt ggttc 415

<210> 3848
<211> 294
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114f03b1

<400> 3848

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aggatgtctt gcaactgtgg atccgggtgc agctgcgggt cagactgcaa gtgcgggaag 120

atgtaccctg atctgacaga gcagggcaga gccgccgtcc aggtcgccgc cgtggtcgtg 180

ctctgggtgg atactgagaa caaggcgggg cagttcgagg tggccgccgg gcagtccggc 240

gagggctgca gctgcggcga caactgcaag tgcaacccct gcaactgtta agct 294

<210> 3849
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114g05b1

<400> 3849

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cgccttctcc atcctctact cgtcccggag cttgaccgtg gccaggacgg ccggcgaggc 180

gctgacgcag agccctctgc tcgccgccct cgacctgagc agcaggatgc cagaggatga 240

cgacgatcaa agcgatgagc cagcgttccc tgcggacgac agcgtgacgc ctgagcagag 300

cacacctgcg gaggtcgtct ccttgccagc tgctgctccg agcaccggtg aggcggccat 360

gcagctcgag gagaaatgcg acatttccag ggggaaatgg gtgcgggagc cgaatggccc 420

ggtgtacacc aacct 435

<210> 3850
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114g08b1

<400> 3850

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tccatttttt gggatcaact ggtcctcgtg acgatagtcc aagaaccaac gattggaatt 120

tcttatggtg tgtgtacggc gattcagaaa gtaaaactca tgcctaggtg gtcaccggtc 180

agtaataagt tctttgaatt ctctg 205

<210> 3851
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114g10b1

<400> 3851

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gcgtggaggc ggagcgcggc ggcgagggcc ccggcgcacc tgtgcctgtg gctggcgctc 120

gtcgccgcca ccctggtgct cgcccagggc aagaaatcca acctttctga ggtgacgcac 180

aaggtctact tcgacatcga gatcgacggc aagcccgcag gtcgggttgt catgggactt 240

ttcggcaagg ctgttcctaa aaccgcagag aacttcagag cactctgcac aggagagaaa 300

ggtatgggca acagcggcaa acctctccac tacaagggga gttcgttcca cagaattatc 360

cccagcttca tgatccaagg aggcgacttc actcttggtg atggaagggg tggtgaatca 420

atctacggca caaagtt 437

<210> 3852
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114h08b1

<400> 3852

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ggacatcctg cggcacatct gcacggacgg ctgcacggag gtcggacccg tggggcaggc 180

gccggccaac tcgccgtgcc cggcgtacgc gacgtgccgg ggcctgcagc tgctcatccg 240

ccacttctcc cggtgccaaa gccgggccac ctgcccccgg tgccagcgca tgtggcagct 300

gctccgccta cacgccgcgc tctgccgcgt tcccgacggc cactgcaaca cccctctctg 360

cacgcagttc aagctcaagg agcagcagaa ggaggcggtg tcggcttc 408

<210> 3853
<211> 66
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316114h12b1

<400> 3853

gtctgtttgt aataaaattg tgaagatgtg aaaatatcaa ggactactat tctgattgtt 60

ctcttt 66

<210> 3854
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115b01b1

<400> 3854

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aaaaatccat ggaagctcta ggtaggaacc aaataagcac cctccatttc cacccatcct 120

tttgtttgtg tgccctgtat ttttggagtc gccggccggc caatctttcg gaaatgcata 180

taggctgagc tctgtgatga gatgagatga ggggagctgt tcatcatc 228

<210> 3855
<211> 106
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115b09b1

<400> 3855

ctattctagc caccaccttg agcagctacc aaatcctcag ccaagcaagc atggccagcg 60

tgaattggag ccgtgcagcg gcggcgctct tgctggtagc agcgct 106

<210> 3856
<211> 106
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115b10b1

<400> 3856

cggacgcgtg ggcagaacta ttctttctgc ctgtgaatgt aaaacataag attgcctatg 60

tgtcacgact caaatggtat tgtcatctac tcatctctat tatggc 106

<210> 3857
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115b12b1

<400> 3857

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atattgatat gctgatatcg tatataactt cggtggaagc tggacaaggt ggacagggtc 120

ttcagattgt atccccatac aaaatcccgt ccccaattct acaagccacc tgaccaggga 180

agcctactct ctggtctcgc ggctgcgaat aattttgagc tcggaacact ctgtttgtgg 240

cttgccgcct ttctttcttt ggctgtgtgg acctttttaca gcttctgatt tttctcgcat 300

ctccagggag ccggaacaag cacctgtttg taccgatccc tttttcatct tttcctgatg 360

aacggcttgt attccgaata aatccatctc gcgtgatgat ggaaggaacc tgatttccag 420

aaataataat tcagagtgtt tgagacgt 448

<210> 3858
<211> 93
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115c11b1

<400> 3858

cccattcgtc cgcccacgcg tccgggcttg tacctttttac ttttatttac agctagtaat 60

aataacgaaa gaatccagcg ttttctttgt tct 93

<210> 3859
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115d02b1

<400> 3859

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tagcagagca gtactgtcct actatagtgc agccggtgcc aagtggcggc agcgctgccc 120

caatccacaa taattgctag tgctactggc cggatgtctg ttgcatctct ggtcaaatct 180

gcatgatttg gcttttagtt tggaattgca tgtgatgtgc gtgtgttggc gattatgtaa 240

agttctttgg gggtgtgatc gtttgaactg tctaccaata aaaaagctct atttacattc 300

<210> 3860
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316115e12b1

<400> 3860

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tgcaccatga atttactgca aataatagca aactggtaat ttgtttgtgc 110

<210> 3861
<211> 64

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116a05b1

<400> 3861

ctcttttctg tgctcgtgtc cctgccctcg atcggcaata tacaatacat gctggatttg 60

ttgc 64

<210> 3862
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116c04b1

<400> 3862

atcttgttat cagctgatca tggaaacgca gaggatatgg ttaagaggaa caaagctggc 60

cagccgatgc tcgacaagag cggcagcatc cagattctta catcgcacac gcttcagcca 120

gtccctgttg ctatcggagg ccctggtctc cacccaggag tgagattccg ctccgacatc 180

cagacacccg ggctcgccaa cgtcgccgcc accgtgatga acctccatgg cttccaggct 240

cctgctgatt acgagacgac cctcatcgaa gtcattgaca agtaaaaaaa aaaacactgc 300

gccctctgaa gccaaaattg ctgcagccga ttttgtcgct atagttttgg ggtgggtcaa 360

ggaatgatcg catcattgaa taatttgaga tttgccagca cgcttgctcg aactcatatg 420

taacattgag aaaggtggat tttacttgc 449

<210> 3863
<211> 214
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116d02b1

<400> 3863

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ctggtggagc agccgtttgc cgggggggcgt ggcagcagac gcatacaaaa gcaaatataa 120

gatagagcca aaaggtataa aaaagagaat aaaatacaca aaaaaaaaaa agaagaaagc 180

cgtaaaagaa aaaggaatac cacagaacgg tgat 214

<210> 3864
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116d04b1

<400> 3864

cccatttttc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgtg acgacgacga 60

tgatgatggt ggcgatgatg ataatgatga tggtggcgac gatgatgacg acaatggccg 120

atcccactcg gaccacgact gtgactcggg ctctgactgt gatggtgatg acgctaactc 180

aaagggcagg aagaagaagc cctcagctcc agagaagaag ggagtcctgg gaggtaaccg 240

gtaagaagaa cgacaagctg cctaaagtga caatatatat gggcgtgcga gcttccatcg 300

cccttcaagt cattacttgc ttcaagatca tgagagcgag cttatcttta aacatgtatt 360

agccataaaa ctctgtacgc gcatgcactt taaagttatg tatctggcta tagcctacag 420

acaatgaagt ccgcatac 438

<210> 3865
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116f05b1

<400> 3865

cccacgcgtc cgcccacgcg tccggccgct agggtgttcg tccacacact cccgccgccg 60

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gaagaagagg atgaggaggc tcaagaggaa gcgccgaaag atgaggcagc gatccaagta 180

ggtgccttgg agggagggga agcatcatct tacatccagg cagcggaact ctgagggatg 240

atggcattgt ccgagtgatt cctgatttgt tttgcggttg tggctgtgga agttgcttta 300

cctgtgttta gctgtttaat actagtctgg ctatgttcca ggactgagtt ttatgtaatg 360

taaggattat atgtgtttgt gactgaattt tatgcaccta tt 402

<210> 3866
<211> 441

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116f11b1

<400> 3866

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accggatctg gatccagcga ggcgaataat gatggtgatg cctcctacac aaatgcaaat 120

gcttctggta atggtggcgg cgagggcgga ggtaaaaatg gtggaaccgg cggtggtaca 180

tgcagtggaa actgatacgg tgacgcaaac ccttgaagcc tattcgtgca atcaaaacag 240

agcaagagcc caagctattg gcgttcgctt atttctatgt gcatttgttt tgctcttacg 300

tttccatgta ttagggacaa ctaataaagg gcttcattac ataggtgtgt gctatgtaat 360

gcggagacta tgtattatct aaatgttgct ccaacctttc attccatact tactgtgtcg 420

atgagataac acttaactat c 441

<210> 3867
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116g07b1

<400> 3867

atgataacta atatagcaaa aagcatactc tcacttcatt gtataacttc aaatatgtct 60

tattctgtat tatatttgga catgtataaa atactaatgc taaaatctat aaaggggtag 120

tagtgaagca ataaactacc ctcatgtttt aaacaacaaa tctgttgaga gcaccgtttg 180

gctattgagc ttctttttt 200

<210> 3868
<211> 93
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316116h10b1

<400> 3868

gcggtgtttg gtaatggcag gtcctaatta aacatgatca tgagatagtt acgaagaaac 60

aacaccacca gtaaatattt tctgagttct ttt 93

<210> 3869
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316117d02b1

<400> 3869

ccttgtattt ttccatacgg aacgggtcga acgcgcgggg atacttcgtg tggtcgttcc 60

tggacgtctt cgagttcctc ttcggctacc ggctgaggtt tggcctgtgc ggcgtcgaca 120

tgggcgacgc ggcgaggagg aggtacaaga ggagctcggc tcgctggtac tccggcttcc 180

tcgcgggcgg cgagctccgg ccggctgctt ggccccagaa gtcctacgtc caatgagaaa 240

acaagagacg ctcacatgtg gctctccggt ctccacgtct ttgttttcct caagctgctc 300

tgcaggacga aaatacctgt accgggttca cgtgcgcgcg cgcgcacaca cac 353

<210> 3870
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316117d10b1

<400> 3870

ggcaccgata aggtggcctc cgacgacctg gacccggcgg cgcgggagag cctggccagc 60

ctgtggcgcg tcatgtgccc gaccaccacc ggggaggacg acccgctcat caacccgttc 120

gtggacggtg cgccggggct ggacgccctg gcgtgccggc gtgtgctggt gtgcatcggc 180

gagggcgacg tgctccgcga cc 202

<210> 3871
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316117e10b1

<400> 3871

atttttgcca tcatcacaaa tccggatcca tacaacccac ttgtggagag cattgcacgt 60

ctgtacctga ctgatagagc taagcatgat gaaatagctg ctgaatggac attgaggttt 120

gcaagatagg gagtcctttg tgtaactaaa taagaaaaat tgactctgta aatgaataat 180

cttgtatgta tcctgagata taagttggaa aatgaccaat acattaatct gagttgtg 238

<210> 3872
<211> 168
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316117h10b1

<400> 3872

cgttttcttg ggtccgccgt cgcccgagca ctccgtctcc tggccgaagc gccgtcgttc 60

caccggcgca gtcgccatgg gtaaggtgca cggatcgctg gcccgagccg ggaaggtgcg 120

gtgccagacg cccaaggtgg cgaagcaaga caagaagaag cagccgct 168

<210> 3873
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118b01b1

<400> 3873

tctatgcgtc cgcccacgcg tccgcccacg cgtgcgccca cgcgttcgcg gacgcgtggc 60

ggccgcgtcc tgcccgcccg gacgcttccg ggccgtgtcg ccgtctacgg cggcc 115

<210> 3874
<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118b02b1

<400> 3874

ttttccacca gcccactaca cacacatgcc cgcgatgggg atcttgaccg gctggacggc 60

gagcggcgcg gatggcgact ggcgccaggg agctctgtgg cggagcgcgg ctgggcgccg 120

gcacggcgag cagggcat 138

<210> 3875
<211> 161

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118c10b1

<400> 3875

ttttgctctt gaaatgtatt ttccaacata caccttattt tctagttttg gaagcttttc 60

ggtcacgctt tccggtgcaa atttgcaaaa cccggtaaaa gtagatgtaa aatgtgtgtg 120

gattgcagag ggctctatgc ccatacaagg aataattcct g 161

<210> 3876
<211> 205
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118d07b1

<400> 3876

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cttattagtc catgtcctag tactattcaa gagctctctt atcatctcta atggacagag 180

taacatgatg tttgtttttt cggcg 205

<210> 3877
<211> 91
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118e04b1

<400> 3877

gtttgcgtct gcttagctgg agccttgtta cggtgtgtgt cacagtgtca gttccaccta 60

tgatcgatcg gtatcctaac cggtttgcgt t 91

<210> 3878
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118h02b1

<400> 3878

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aaccgtgccc ctggacaagc tttcctgtct gccgcataat ctagcagaag tctatccgtt 120

ctatcgcaac ttattttacc gtgtggaact tagattccaa gtgcctgtgg tgctatgtta 180

ttttgtctga atgttgtgtc gaaccttgtt atggaagata ttatctattt tgtgatgatg 240

gtactaatat gaatggcctg ttgaatcaaa aaaaaaaaaa aaacaaaaaa aatatcccat 300

t 301

<210> 3879
<211> 68
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118h05b1

<400> 3879

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ccagttat 68

<210> 3880
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316118h10b1

<400> 3880

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cgttctgatt tcctttggtc agaggtgtcc ctgctttgtc tatgcgaaga ataaatgtgg 180

atggtgtcgc cagacgacgc ctggttcatg ttagttggac atgagttacc ttctgttttc 240

cgcatcaact agtacttctg taatggagtt gctaatcaag tactcttttt tggttgtggt 300

ttgtgaagat tatataaatc gttcagtcca gtacttgtgt ttgcctgaat 350

<210> 3881
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120a02b1

<400> 3881

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acgatacccg ttccatcatg cgaaacgtaa agggccccgt ccgcgaaggc gacattctgc 180

ccctccttga gtctgagcgt gaggcccgcc gtctgcgata aactgcgcat gtggggtaga 240

acatggtctg cgacgatgag cacattgaga accagttaga gcaaaataaa atcgaccttt 300

ccatgtt 307

<210> 3882
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120b04b1

<400> 3882

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gcagcgcatg aacgtgttat tattttgcaa ttcttatttg gtgttttgtg ctgcgagtgt 120

tgtataatat gccttatttg atgacatttt tacttcacat tcaggtaatg tgttgtcagc 180

agactgaaat ctgtaataaa tctgctgctc tactgtttgt ggagtgttt 229

<210> 3883
<211> 332
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120c09b1

<400> 3883

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cgaaagaaaa aaaaaggttg ccgattgctt ctgtttcatg tttttatgta tttatagaag 120

aaaagaaagg gaacacgacg atttgtagaa cagaattggt gttgtacata ggagcagagc 180

aacatctgct atattagtta caggggagag atgtccactg tgattctgaa tcgagcattt 240

ggaacctagg tgatgaattg ctttgttggt actagcaaac aatgtgtttg atgatttttg 300

attcatttaa ttcaatttgg cctggtcttt ac 332

<210> 3884
<211> 221
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120f01b1

<400> 3884

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gccttatcct ctccggaccg gagcgagcga gcgccccacc gctccctgct cccccccttcc 120

tcccgatggc gtccctcacc accaccaccg cctcctcgcc ggccgccctg cccgcggcgg 180

cctccgccgc cccggccacg gcctcgtccg tctcgcccac c 221

<210> 3885
<211> 238
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120f03b1

<400> 3885

tatcttacac gaggagagct acgccgcgct agcatgctaa tgctacaagt caagtggcca 60

tctaacagac cgagagatgg caaaggcctt ctctcgtatt ctttttttccc ctttttttga 120

ccatgtgtaa atttgctgcc tctttttcat gtatttttga gcgatgaaag ggcaattgaa 180

cccaaaaata tggtggacaa gtgattaatg aatcaaggag attcatcatt tttttgtc 238

<210> 3886
<211> 128
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316120h12b1

<400> 3886

tgtatatttt gttaggatca tgtacaccaa tctgattgat aaagattcgg ttagatctct 60

ctctttcttg attcccaaat atgtaaacct accaaccttg tattcttggc ctacatggct 120

ttgccccct 128

<210> 3887
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079d09b1

<400> 3887

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cggcaccggc agcggcatgc cattcacatc gccctcgcgc accatcggcg gccccctcag 120

gtcctatccc aacttgcggc cgtcgaccgc ggcggccagg ccaggcctct ccttccaccg 180

gtcccgagac caggggacac caaccccgtc gtccagcgct gggtgcctca gatcggcatg 240

cctcctcccg atgcagaact gttctgggaa tactactgct aatgaatgtg tccaatcaag 300

ttcatccatg tcaaactcta tcaactagaa atagagttgt gtcaaagaga aggaggagtg 360

cgtgcagggg gagtggcggg tcaaggtgct ctcatcggag ccgctactga ccggcagatc 420

caggcgcacc ctccccgtgc gcgcaggggg gtgacaggac aacgtgcgc 469

<210> 3888
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079d11b1

<400> 3888

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tatttctgcc ggaaagctgt tgatgaatgg ccagaccctt gctgactaca acattcagaa 120

ggagtccacc ctccacctgg tgctcagcct caagggtggt atgcagatct tggtgaagac 180

cctcaccggc aagaccatca cgctggaggt ggagcaatat gacaccatat acaatgaaac 240

ggcgaagatc caggccaagg agggcatact accggaccag cagcgactga tcttatgctg 300

tgaagcaggt cgaggatggc cgcactctgg cggactacaa catccagaag gagtccaccc 360

ttcacttggt gctccgccta cgtggtggcc agtaagt 397

<210> 3889
<211> 338

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079d12b1

<400> 3889

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agagagagta aaaaaaaaaa agaaaaaaaa aattgggggg tcgtttttga ggatccatgt 120

ttgggtccgc gttcatggga ccctatttgc tcttttatgg ggttacctaa gttcaattct 180

tctggccgtt gttttggggt ggtttttttg ggaaaccctt tgtgttcccc cggttgatcg 240

ccttgttgtc ctttttttttt gtggcccgtt ggtgtattag cggggtggcc ctttccgatc 300

gtttttccga acagttgcgc ggtttgcctg gttttttg 338

<210> 3890
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e01b1

<400> 3890

agaggggctg gagcgccacc gcgaatccca tcccatcccc gcaccgccgc cgatcccgcc 60

cgcccgcccc tccgcagatc tccccgacat tgcccgctcc ccggccggat tcgcccagat 120

ccaccgacgc cgcgcgcggt gctcccggcg gcgtggcccg ggccgtctga tcggggaggc 180

tcgatctttt tggttggtgc tgttgtctgg agggtggtgg cagcggagat gggcgtcgga 240

ggggagaagt tccagctggg gacggtgggg gcgctgggcc tctccgtggt gtcctccgtg 300

tccattgtca tctgcaacaa ggccctcatg agctccctcg gctttacctt tgctaccacc 360

ttgacg 366

<210> 3891
<211> 80
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e02b1

<400> 3891

aaaaattttt aaaaaaaaaa aaaaaaaaaa aaaaaaaaga aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa 80

<210> 3892
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e03b1

<400> 3892

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gccacagagt cacagtagca ctagcttgag ctagccacct tctgccactc cgggcatttt 120

cttgcatcca cgaaggcaat ggccactgct gatgtccaga acccggcggt cgcgctgacg 180

gaggaggcgc ccgcggtgga gacacccctg gtcgccgagg aggtcgcgaa gacggaggag 240

gcccccacgc cggcggtggc cgaagtcgaa gcgcctgctg cccccgtcga ggttgaggag 300

actaaggagg aggcgccggc cgccgctgag accgaggaga ccaaggagcc cgagcccgc 359

<210> 3893
<211> 383
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316079e04b1

<400> 3893

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gagccagaca caacgcgcaa gacccccgac tacttttttgt aatcgtggag ttgacttttt 120

tttaactgtt gtgctgctgg tgctcctatc atgcgcagca ctgcctggct ggatctgtag 180

atctctgtcc ttagaaaatg ggatatcttg agctgagttg tgtacccccc tctcattctt 240

ttgtttggag atattggatg ccgcttttta tgacctcata ggacatgtta aaaggacatt 300

gcatgggtct gttntttgaa tcttcattct gcattatgtt cgagacagag aagggaagct 360

ggaatagaat cgtctcgtga cat 383

<210> 3894
<211> 346
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e06b1

<400> 3894

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gcaatgaggc cgctcgttgt cctggctctg gccgtggcgc tggccggggt ggctctgcta 120

gggggctccg cggagggggc cggccagtgc ggcaggtcct cccccgaccg gatggccctg 180

cacatggccc cgtgcatctc ggcggcggac gagccggact cggcgccctc cagcagctgc 240

tgctcggcgg tgcacaccct agggaagagc cccagctggc tgtgcgccgt catgctgtcc 300

ggcaccgcca agatggccgg gatcaagccc gaggtggtca tcacca 346

<210> 3895
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e07b1

<400> 3895

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ccttcgcccc cctcacatta ctacgaattt acaagcaagc atggatcact ccttcttggg 120

tttgttgctg tcaggggcgg cggtcgcttc ggattgaggt ggtgcgccgg cgacgtcgcc 180

ggtcatcatc ttcttgaact cgtcgaagcc gacgcagccg tcgccgtcga cgtcgacgga 240

ggcgatcatc ttctcgcagt cctcggtgct gcacccctcg ccgatgcggg cgaggacctt 300

gctgagctcg gcgacggaga tgcggccgtc gccgttgatg tcgtagatgt cgaaggcgtc 360

gcgcagctcg gcgtccagct cgcgcttccc cg 392

<210> 3896
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e09b1

<400> 3896

gtactactct tttctctccc atcctgtgcg cccttcgcgt ttcgcgccca gagtgctctt 60

tgttcacgtt cacgttcacg ttcacgtccg ttgccttgca cccacccacc cctcgacagg 120

aaacaagaaa gagaaggcag aaaaaaagct cgtctgccgg acatggagag ctcctcctcg 180

tctctgttgc tgagttcgta taccggcggc aacaagaggg ccagggaggc cgaccttgac 240

gtggcctcat ccgccgaggc ggaggccgcc aagaggatac ggcccgagga cctgctggac 300

ctgctcgacg atgacgccga cgccgcggcg gccggcgacc tggcctccgt catgcgaagc 360

ctggaggagg agatatgcgc cggcgacctg gccgcgccgc agccggagct gggcttcctg 420

ctcgaggcct cggacgacga gc 442

<210> 3897
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e10b1

<400> 3897

ttttctgtgg gcggacgcgt gggcaaacca ctgcttcggg tacgatcact aagattatac 60

cctattatag gctagtggta gctccagtgt ctgttacaac taagacgacc tcccaattgc 120

ttggccaagc acctcaaatc acattaagtg aaaatgcgga gctctctaat caggcgacca 180

cctatgatga tgttcagtca tcgggtgcta gttcttttat acctatgtat aatcgaactt 240

tttgtagatt gaatcggttg ttctatacga acaatcctgg agatgctttg gtctcacgtg 300

ctcctgatat tgcaaaattt caactggaaa tagatagttc atctggcaac tttggtgcaa 360

catcttctct ccatagatgt gcatctgatg acttccattt ctcggtttgg ttaggagttc 420

ccacgatggg atggttacaa acttaaagtc caagtgacta taaaaga 467

<210> 3898
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e11b1

<400> 3898

cttatttttt tgttacacat cacaacgaac taaacatgga tctctacatg agaattgctc 60

ctgaactcca tctgaagcag ttggttgtgg gtggcttgga ccgtgtttat gagattggaa 120

agcaattcag gaatgaaggg tttgatttaa ctcacagtcc tgaatttaca ggatgtgaat 180

tctatatggc ttatgcagac tacaatgacc tgatggagct tactgaaacc attttgtcgg 240

gtatggtgat ggagctgact ggtagtacta agataaaata ccatgcgaat ggagctgata 300

accctcccat agagatcgat ttcacacctc cttacagaag gatagatatg atgcaggcac 360

tgaaatctat cgctgggctt gacattccat cagatttgtc aagcgacgag gctaacaaat 420

acctcgcgac aacgtgtgag aagtatggaa tcagatgctc gccgactcaa acaacagcac 480

ggttgcttga caagattact gggcatttgc tggaggccac atg 523

<210> 3899
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079e12b1

<400> 3899

attatttttc tttttctcgt ccgggacctc gatgtcatgt attctttccc cctactgccg 60

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tgagctcatg tgctatgcaa gtaaggatgc accctatgta ccgccaatat ttggtccagt 180

atttgttcat ggatcgaggc tataattcat ttgtactcat caaaaaaaaa aggagcaaaa 240

aaaaaaaaaa aaaaaaaagg agctagatg 269

<210> 3900
<211> 217
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f01b1

<400> 3900

atcatcttct tataccaaag cccatcttct tctccttgaa atctttttgg gttcacagat 60

ttggaggatg tcttgcaact gtggatccgg ttgcagctgc ggctcatact gcaagtgcgg 120

gaagatgtac cctgatctga cagagcaggg cagcgccgcc gcccaggtcg ccgccgtggt 180

cgtgctcggc gtggctcctg agaacaaggc ggggcag 217

<210> 3901

<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f02b1

<400> 3901

cccactttgt ttgcgccaaa ctttgggttc ggaaagaagg cacaggtgtg aagacaagaa 60

cgagcaccac ccgcacatgt tagaggaggt gtgtcaacat gggtcaatgt tttgggttgg 120

ttgtgtttta cgcatgaata aagcaaaatg ctgtgattct gtgtacggac gagccgcgga 180

tgcgccttgc ggggaggagc agaaagggat acagaa 216

<210> 3902
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f04b1

<400> 3902

gcgctttatt gataatggag aaggaaggga tcggcggtct gtacaagggg cttgggccca 60

gctgcatcaa gctcatgccc gcggcgggga tctcgttcat gtgctacgag gcctgcaaga 120

agattctggt cgaagccgag gagtagagcg aagtgcgcca ccggtgtcgg gtccttaaag 180

aagaggcggc aggaggatta agcctcgtct tccttttctat caagaaaaga aaaattggat 240

gatcaactac tcagcagaag cttaggtcaa aggtatttga gacacgtctg ttagatgatg 300

aagttttggc ctctaaatta gttctgtgtc cgagttgaaa tccataaaca atattctgac 360

tggcggaagc agttctgtca tgctact 387

<210> 3903
<211> 209
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f07b1

<400> 3903

aagttgttgt tgccctcctg gtaaatgttt tggctgttta ggtgggtata catggtcatg 60

gacctgcagt tgtatcctgc tgccataacc ctctctgtct gcatatgtga gagtcaacag 120

tccatgtacc tgcagaagat ttcctagctg tcagtcgcgt tgaattctat tccttaccat 180

cgtcgtaaat gaagttttga cacccgccc 209

<210> 3904
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f08b1

<400> 3904

gtcagtttgg aggccagcat caccgcctgc cccacccacg agcgccacct accacccacc 60

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gtaggtagcg gccatggagg ccgccgcggc catccggagc acggccgcgc cgcggatgcg 180

cctcgcgggg aggagcagca ggggatccgg cgccgcggcg gcgcgcgcga ccccggccag 240

ccacagcgac tggcagacgg cctgcgccat cctctccagc accaacgaca ccccctcccc 300

gccggcgccg aaggtgaacg gccagaacaa caacaacaag ctggccgcgc cggccatccc 360

cggctccgag gacgccgtct tcgcctggat ctg 393

<210> 3905
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f10b1

<400> 3905

gcgccttcgt gttcgcccac gcgtccgccc acgcgttcga ttgaaaagat gaacagatcg 60

acaagaagtt ggaagaagaa gacaaggaaa gaaaaagatt aaagataaaa actgacaaga 120

tagcaaagtt ttttgcggtt aatatttaca aataaaaaaa aaaataaggg gggggccttt 180

tttggggttc caggtttccc tccgcgtgct tgggagtttt ttttttttt ttgggggccc 240

ttaatttaat ttctttggcc gtggttttcc accgggggt tggggaaacc ctgggggttc 300

cccaatttat tggcttgggg gcacttcccc tttttcccgg ttgggttatt accgaagggg 360

cccgaccttt ttgcctttcc caaaattt 388

<210> 3906

<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079f11b1

<400> 3906

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ttgcatcgtg tcttatttaa gcattgaaac tatcttcatt tgatttctct gtgctaaaca 120

aaatttttg agataaatct ttacaaataa aagaaaagtt aacatgggaa agaaacaaaa 180

tcttgatttc agaaccatga ctactcaagt gttgaattgg gccacctgtt tggtggaaca 240

agaaactatt cctcctatcg gccatcaaag actgttttta tcgggtaact taaattcaat 300

taactgccca ctggttatac ttgaagaaac tgggaaaacc c 341

<210> 3907
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g02b1

<400> 3907

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cccttcttca tatggcgcct cattaccctc tattctggtg tctgtgagtc tgtccctctc 180

tcttcttgaa ccctagaaca caagcagatc tcaaatccta actctctctg ttattggata 240

ggttcatccg ggttcagttt tgcagatctg tagcaatcaa gtcctaatcc ctttctgctg 300

cttcagattg ccagtgttgc acgagcatgg aat 333

<210> 3908
<211> 224
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g04b1

<400> 3908

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ccaggcaagg agaaggatcg acgaccatcg tggtgaagac aggtaccggc gacgagtttc 120

aatgtggcaa gaggaatatt acagtggctg cgaagactag caagttgcgc aaggaacaca 180

ccggcgccca cctgacggtg gaagcactga acaaacttat tttt 224

<210> 3909
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g07b1

<400> 3909

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ctgtaagctg taactatggt gaagaaaact ggttgctatg cttgatatgt atagggggga 120

agatatatgc ggaaatattc ggtccattta ctacataata tgatgatact gtaattgttg 180

gctccaataa ttgatccata ataaataatt aaacaacctt tgagcttaaa aaaaaaaaaa 240

acaatccaat attaag 256

<210> 3910
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g08b1

<400> 3910

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caggccattc ctggcggcat gcctgaagaa gctgcctgac aaagaagcta gagaaaaagc 120

taaagaagta caccgtgttt ggcacgggca tatacagaac ccagagcgga atcccttcaa 180

gactgtcaca gttgaaggta taccagagga gattattgat gtcaatgatg acaagctgca 240

tggcctatgt gctgcatggt gtgaaggggt gcacaaggct gtggacaagt gtttggtaga 300

aattcaagaa agtggtaagc tgagagatag aaacattgag cccgacgtct ggaattacaa 360

gtgcaag 367

<210> 3911
<211> 323
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g09b1

<400> 3911

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ctacatggtt gacgccattg atgagtatgc cattggtcag ctcaaggagt ttgagggcaa 120

gaagcttgtc tctgccacca aggagggtct gaagctcgat gagagcgagg acgagaagaa 180

gaagcaggag gagctcaagg agaagttcga ggggctgggc aaggtcatca aggaggtgct 240

gggcgacaag gtggagaagg tcatcgtctc tgaccgtgtt gtggactccc cttgctgtct 300

ggtgactggc gagtatgggt gga 323

<210> 3912
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079g10b1

<400> 3912

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atatggaagc atgaatagtg caggagctag caaagctgcc gctcgccgta tggaacacca 180

gtaccaccgt gggaaggtgg aagcacaaat agaagctgct ctttcttcct ggccgagtat 240

ggatcaagcg tctcggtcat tagcttggca gctatgcaac atgccgtctc gccagcacaa 300

cttcaaccca tctgcacagg ttcagcgacg ccccccttcc catgtcctct cgatggcagg 360

attacctcga tctctggtgc agccgtggcg ttctggttct tttttctcgc ttgcagaaga 420

taagctttct aagcacaaga ctcttcagct tactgaaaac tttcttaccc acaaaacttt 480

ttgctgatat ctaaa 495

<210> 3913
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079h03b1

<400> 3913

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accgctggcc ctcgcccgcg acaagctcga cgacggatcc ggcgagcctt tcttcgtcct 120

caacagcgac gtgatcagcg agtacccgtt cgcagagctc atcgagttcc acaagtccca 180

tggcggcgag gccacgatca tggtcaccaa ggtggacgag ccttccaagt acggcgtggt 240

ggtgacggag gaggagaccg ggaagg 266

<210> 3914
<211> 251
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316079h04b1

<400> 3914

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ctgtgatgca gtgttatcgt ttgcatgttt aaacttctgc tggtgtgcag cagctttgat 120

gaacttcaga ataagtgagc cctgcnaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaataaaa a 251

<210> 3915
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316079h07b1

<400> 3915

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ggaaggcagg agattaccac tgtgccatcc agttacagga ggggactggt ggatcctgaa 120

atgattcaac agatgcaacg tatctagatc ttttggtggt tgaaatgcta tgaagtctct 180

tcagtgtcaa taagataatc tgaatgttct tcatccaact tccagctttc ttttttgtgt 240

acaattccaa agtagcctgt ggtttctctg gagcagcact ggagttgaaa tctccatcgt 300

gatttaaagg aggcggagaa tttttctcta tctttagggg ctttatgtac attcataatc 360

agtcgcttta cattacacca ttttttttgcc ctattatagg aggctgattt gaaactgcac 420

aaatagtatt gtgtcaattt tgagttgcct cgtgccatat tgcagcactt tacccgtatg 480

gtgtgtaata cttcctccgt tcactattat aagacgcttt gattttt 527

<210> 3916
<211> 548
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a01b1

<400> 3916

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gcgcagaagt ccaagatggc gagggagagg aacctcgaga agctgaaggg cggcaagggg 120

agccagctcg aggccaacaa gaaggccatg aacatccagt gcaagatatg catgcagact 180

ttcatctgca ccacctctga agcaaagtgc aaggagcatg ccgaggcaaa gcatccgaag 240

agcgagctcg tccagtgctt ccctcacctc aagcagtgat atctgcccaa tcagacagag 300

agagagataa aagagagaga gagagagaag ctgtcataat ccacctacta ttatcatgtt 360

ccgcaatgac tgattgttga cctaagcttg gggtctgaac tcggtgtgct gctgtcccgg 420

ctgctttggt tgtgtgccca tctactatgt aatcgtcctc tatcagcctg ttgtgctaca 480

ttatcttaat cctctgtgga tttgctcctc gtgcttagtc agtatgctgt cgcaaaatca 540

tttttttt 548

<210> 3917
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a02b1

<400> 3917

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tatgggtgag ccggagcggg cgcgcaccat gatgaacaga gtgccgctga tgcagctgga 120

tgaccagggg gagtagagcg gcgaacaaat gacgtaagac tggtcttgca gcctcaaccg 180

caatggaagg aggatgccat gactactgat gaactgact 219

<210> 3918
<211> 560
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a03b1

<400> 3918

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agagcggtat ttttgtcgac atgggggga attttatcgt gctggatcgc ggttgaatat 120

ttaatgtatc ccaggattga ccgtggggag atagttgcta aatacaacac aaaatcctag 180

tctagttaaa gaacgaatgg taggattatc agaagatatg ccatcccaga gagctatttt 240

ttgaccctct tctttaagat cggcgatgag gaaaaatatt aggtcacagg ccgaagcacg 300

aagatgctat attcttatgg tttcctagcg agaattgaac atatttagtt ctcgagacgg 360

aatattgcaa gcttcactta aaagaacacg ggggcatcat aattgaattg ccccatgttg 420

ctcactttaa taaattgaca tgaacttgta acaatgcttc taaacagata aagtgactcc 480

gtcactcttg ggtcgccgaa gctaaccagg tctggcctac gggagaatag ggagtgacac 540

tatactgagg aacgatgcct 560

<210> 3919
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a04b1

<400> 3919

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gggagtttat ggcattagcc gctattggct caaggaacag gagagacatc tgagcgactc 120

cttgcatgta cggaattaca ccagggacat taccttgcag gggtctccct tgccggaatt 180

cttgcgggag gaatatgaac tatgggcaga ccaggaatgt ttgggtcatt atgtgttgca 240

tttgggaatt taccattcac cccaactccc tgtcgatccc cgggtaccga gctcg 295

<210> 3920
<211> 219

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a06b1

<400> 3920

tagacgtccc atagactaga agacgaacat gatcaccagc ctacgctcgt gggagaacaa 60

cagaaccacc atgacacgct gacacagacg aaagaggaac tggaacttct ggacggacac 120

attaaagagg agtatgatga cccgaggtct aacaatgcca ctggccgtct atatacacta 180

ctaaggctgg taaaacaatg tggttactga acataaatt 219

<210> 3921
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a07b1

<400> 3921

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tttttacact gaggctgatt aaagcaaagg gtcaataact cgaaaccaat ggcaggagtg 120

cacgttggga gttataagag cttgatctac tgggcaggtg ctacaggata gctgacggtg 180

tagaacatac agctcggata gttatatgag gttgttgaca aggaacttag ttgagatttc 240

gagatcctaa atatatttgt tgttcacata ttagagcaat tgagtgtatc atctcttact 300

gatgatcata ctctagaagt caactatata tgctgatgca tgctgagaga atgatctgac 360

agatgcgtta tttgagatca tcctatgttt cacttcatgg tcactgatga cacgtatggg 420

tagatggact ccgagaaagg accattagtt tcgacttta 459

<210> 3922
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a08b1

<400> 3922

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cgatacagcg tcagttattt ctgtagaggc aaacaccggt tggcatggtg gaaagactaa 120

gccatatcac tcgggctaac cctggaacag ttgtcgtcga ttgggatggc cagttaccgt 180

<210> 3923
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080a12b1

<400> 3923

tccacgcgtc cgactagttc tagatcgcaa tcatcattat ttactgtcat tttc 54

<210> 3924
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080b04b1

<400> 3924

aactacagct caacacatca tttgcaccgg tcgttcttga tcatcacagc aatggcctcc 60

accgacagct ggacccacga gatcgaatcg ccggtggcca gagcgcgcct cttccgcgcc 120

ggcgtcatgg actggcacac actggaccct aagctcgcac cgcacatcgt cgccagcgcc 180

caccctgttg agggcgaagg cggcatcagc agcgtcaggc agttcaactt cacctcagcc 240

atgcccttca gcctcatgaa agagaggctc gagttcatcg acgccgacaa gtgcgagtgc 300

aagtccaccc tcatcgaggg cgtgcgaatc ggtaccgcca tagagacgac cacctcgcac 360

atcaaggtgg agccggcgga caacggtggg agcgtcgtta aggtggagtc gacctacaag 420

ctgctgccgg tcgtggaggt aaacgatgag atcac 455

<210> 3925
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080b05b1

<400> 3925

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tttattgggc atcgggtgcg tgagtggaac aggatacagt cagaatctaa gatgctgctg 120

gttgacccat gatgagtatc gtgtagcaac aactggatgt gatcatggca cgttctgagc 180

cattgcgttc tatgtggagg agtctaagac aatagataaa ctgattgccg ccagtcaggt 240

agctgggtga acaacatgaa ccatgatgtt agcctgacgg agactaaaga agagctcggg 300

ctccgcatca aagtgcttaa agaggtgctt gatcactcga ggtctacggt tgccaatgac 360

gcgagttaca caacgtagag actggaaaca tcctgttatt acaaaattta atccgttaac 420

agggcataca tgt 433

<210> 3926
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080b07b1

<400> 3926

tttttgcgtg gggcgccgag caacacaatc aagatgtcaa ctctgtcggc ctcatcttct 60

ccaggaagac cgacgcggcc attgacatac tcaagctcat gtcctccaca ttcatgttcg 120

ccttgagcca agccatcgac ctccgccatc ttgaggagac tgtcagggat gccgtcaaga 180

gctgcgcgat gatgacgggc aggaagacat tgaccaccac caacaatggg cacctgcaca 240

atgcgcgatt ctgcgagaaa gacctgctgc tcacgattga ccgtgaggcg gtgtttgcgt 300

atgcagatga cccttgcagt gccaactacc tattgatgca gaagatgcgt gcggttctcg 360

tggagcacgc ctaggccaat ggtgaggccg aacgcgacgt ggagacatcc gtctttgcca 420

agcttgccgc gttcgagcag gagctccgtg cagtgctacc aaagga 466

<210> 3927
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080b09b1

<400> 3927

tgtttttata catatatact cctaaggtga tgcacgcatg atcagtacca gtgtgagata 60

tcgattcatg tatccgtgtt cggtgccata ttcatgcacc tcgtcgtgtg taattattcg 120

gtgtgtacga gaccgacgat atatacttac aagtactgtc tactgtgatt gaggtaaata 180

gctggagcgc tatcgataaa gcttcttacc tacctggcga cgggcaagaa actatcggac 240

tccgactgga gcctaactga acaaaggggc ggcccattta aaggacccgg atttccttcc 300

ccttccacgc cacggcatat atttatttta gtgcccccta attgcaaata tttggcggtt 360

tgttttcaac tttgagacgg ggaaacccct gtgttgaccc aaattaatag ggtggctgcc 420

aatccctt 428

<210> 3928
<211> 282
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080b10b1

<400> 3928

gcgtttttat cggcgcggcg ctggcggtca tctaccacgt ggtggtgatc agggccatcc 60

ccttcaagag ccgcgactag tcaatccagc acctgcgaat ggaatcttat cggtgctcat 120

cgccggtcga tcgatcatgt ggtggcggtg ggggccgctg gcgcgcgccg tcgtggatca 180

tctgctcccc gcccgcgctg tcagaatgcc tgcatccgac gggctaggcc tctcctctgt 240

ctgcgtgcct gcccgcaggg caaactgatg aaggttgcga gc 282

<210> 3929
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c03b1

<400> 3929

gccctagctc cttagaagga taaatgagga acaacgacat aatttgcaaa acctaggatt 60

acccgtaccg agatttttgg gctatggaat cgttgcccgc ccaattgccc gggttgcctg 120

tgtgttaaag gccacgcttc catggctatg atggccaagg aacccatatt attaattccc 180

cagcggattt accagattga cgttaagtta acaccggtag ttggatgaaa cgccagtttt 240

gtcccctacg aaagggaatt gggcgttatc ggttttcgca atgtcagggg agaaatggaa 300

gtttacccag tggtggactt ccaaacaaat tgaccagctt tgtcgttggg tggaggcccc 360

tgttcccatt gattttaaca tt 382

<210> 3930
<211> 594
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c05b1

<400> 3930

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cgaggctgtg ccggcgggtg gcagccacgg cgaggctggg cggccgtccc cggcgtccgg 120

cggagccctt cgccggcgcc ggcgaagcag aggcgaggca gccggcgacg cggcggcgac 180

agcggcggca ccggcagatg ggggcgcgcg tcatggcgtg gtggcgggca agggtggtcg 240

cgcccatgcg ccgcgcctgc aggctcgccg tcgccgccga ccgcgcccgc gtccgcaagg 300

gcgagtgcgg ggtcctgaac cttcaccagg acgtgcagac gtgcggctac cacgacgtgc 360

aggtgatgtg ggacatgctc agctccgaca aggaggccgc tgccgccgcc tcggcgccgg 420

cgaagcagca gcagcggcgg tggaagaggc cgttctggag gctgactacg tcgatctggc 480

ccgcccggtc gccgtgcgcc gctgcagcgc agtgaggcga acggccttcg agctgtgcct 540

gggcatgtga cagaagcatt atcatgcacc ctgccgtgca tgctgtgctg catg 594

<210> 3931
<211> 557
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c06b1

<400> 3931

cccttgcgtc cgcccacgcg tccgtagcat caccagccct gcttcagtag ttctattgtc 60

tctgtgaaat cgaccgcggc gtcgaccatg agctacccgc caccgggcac cgcgtacccg 120

ccgccgggcc aggaggccta cccgcctcca gggtacggcg cgccgccgcc tgtcgccgct 180

aactaccagc agcaagcccc gccgcaggac tcgcaggacc gcggaggcga cggcttctgg 240

aaaggatgtt gtgctgctat ttgctgctgc tgcctgctcg acatgtgctt ctgatcacaa 300

gttcctactg ccaacaccag gaaatcccac gatgatctac tcactcagag ctgctcatag 360

ttgatcatgg ttatttctat tgtagtattt gtgctgtccg ggtggagatt tgtatgggct 420

cgttgtgcta gttaattttg catctggatt ttggcttcat tctgtatcac ggtattgtta 480

ttggcagagt cttagtctct tcagtttgtt ggtgatgaat aacacgtagc agtagcatgc 540

gagattcttg acgacac 557

<210> 3932
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c07b1

<400> 3932

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gcctgcgaca acctgctgca gaacaagact gctgtcacca ccaaagagaa ctacggccaa 120

ggggagaggg aagcacaatg ctctaccgaa cagagaacac tcgatggcct tcaatcaccg 180

gagccgcact tccacacact ggtcaaccac acgagcacct accgagagct ctctgagatc 240

gctgagcaag cagagagagg agctgatatt gcaggggtca gggagctcaa cacactcaag 300

ggccacaacg aatccatggt gaagatcatg ggcctagaca tctacaccat caaccagaac 360

tacaccgtgt gaggagattg gacattgaac caacagacat gacatacgtg tcgtagctag 420

attggaacgg agctcccggt taatatttct tcggtgaatg aatgaaacat acatggctga 480

tctgacc 487

<210> 3933
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080c11b1

<400> 3933

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cggcggccta cgacggctac cgggaaccag aggataggca gtcggcgact cgtcgctgtc 180

agtaccagca ccaagagacg gcggagcacg acatggaccg ctgacgcgaa aggttgtgca 240

aaggaatgcg cgctgcttgt aggctctgct gcctcggcga catgtgcttc ggatcaaagg 300

gcgctactgg cgacctgaac aattaccacg acgagcaact gagcgagtgc cgctaatagc 360

agatcat 367

<210> 3934
<211> 488
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316080d02b1

<400> 3934

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catggattcg gagatccgcg ccatcatggc tcagtacatg cctttggaca gccaagaagg 120

cgcaaaccag caacagcatg tagcgcatgc tggtgatatc tgagaccaga tggcactgct 180

tttgctgagc aacacagaag cgtgcagggc agcgtatgta ttatcatcgg tggcgtcggc 240

tttacagcgc aaagatacgg tttgtacgcg aggagatttg atgtatgatt ctaggaagtt 300

acactgttga gaaccttcat tttgcgagac acgatgaaca gcataggcgg atattgacac 360

ggtttaccct accacctttg acggctctag tgtcgttgca tactactgta ctacgcacgt 420

gtcaacatcc tgtgaatact tggtgttcag actacttgcc cctgttatat ctgaataatg 480

ncgagcct 488

<210> 3935
<211> 550
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080d05b1

<400> 3935

ggcttatcta gagtttggga tttaaagtca tctgaagctg tggctaatct gccaagagaa 60

caaggagaaa tatttggctt ctgccgattt tctactaagt ctgacaatag tcagattctc 120

tttgttacag caatgcaagg tgattacggc aaaataatat cttggaatac aacctcatgg 180

acaagaattg gatcaaagaa agtaacccgt gatgcgattt cagctttttc agtctcgcct 240

gatggtacac ttctagcaat tggaactatt gagggaagca tcagtgttct aggtccaaga 300

gacatgcgag tggttctaac agttaaaaag gcgcatcttg gcattgttac tacattagcg 360

ttttctcaag attcaagggc cttgctgtcg acttcctttg actcaactac aagggtgaca 420

tcgactgaat cacccaagag cgatggtata agcctctggt ccatggtact agctattata 480

ctcggaattt tggtatatta ctatatgcag cacagagaag atctcttagc aatgttgcca 540

caatgaaatt 550

<210> 3936
<211> 502
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080d08b1

<400> 3936

tccttgcgtc cgcccacgcg tccgtttttt ttttttttt gaggcaatca tgctgaatcc 60

atttacccag tcaaccatgt acatacaaca atagtctctt ctagtatgaa gtgagtacta 120

acccccgcct tattacatta gaatcaaaga atgaatgaat ggaagtaaat taagtacata 180

aagaatggta ttccgaaaag agtcgaatgc ttgcaaaatg gtgcaaccac acctaaaatt 240

ttgcttgcaa attaacatat gggtatcagt ctatcctgcc cggcccgata caccactctg 300

ttagcgctac ttcctacagt ttgagtacag ttcctccagc aatggcaagt taagaagaac 360

ctgagaactt ctgcaattgt atgatcaaaa cactgatgtc atcggtagac cccctggaac 420

ccgcggtttc gacaagcctt ctgcaggcgg tcatgcgaga taccttgtca ttgccgatgc 480

agagaggcct ggcgatgtct at 502

<210> 3937
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080d10b1

<400> 3937

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aggagcttga tcatgtagtt gaagaacttg aaaagattgc agttgttcat ctcctacagc 120

acagatcaat catttccctg atagggaacg tgcagagatc gtctctgatt cttgagaagg 180

cgttcaacgt tctacgcaga aatggtgtta atgttcagat gatttcgcaa ggggcgtcca 240

aggtgaacat ctccttggtg gtgaatgaca gcgaggcgaa gcagtgcgtg caagccctcc 300

actcggcatt ctttgagaac ggtttcttgt cagaagtaga ggaagcggac cttgcacaga 360

acatggctcc agtcctagta agctcgaatg gtgccatcaa tggaaactag tcgacgtcgc 420

ttttttctat ttccagcaat ggatgcgccg gtcttaggtt aagagggtga ttcgaccttg 480

gattatttag gccacctgag ctgattcatt ggtgttgcac gagcggtatt agagctatca 540

atttt 545

<210> 3938
<211> 71
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080d11b1

<400> 3938

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cacgcgcagg g 71

<210> 3939
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080d12b1

<400> 3939

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aggtggaggc ataggaggag gcgtgcgagg aggggaacga gggggaggat gtcatgcaga 120

ggaggctgat atacgactcg catctgcact acatttactc gcagaacaag gtcacgccat 180

gagtgtcgca tgcgctagtt cttacttcga ggtcataatg atgatgctgg gcattaagtt 240

gactcaagga attatatggc gacgattatt gttatcttaa tcatatatta ttgatgtacc 300

ttctgttgtt ttgactg 317

<210> 3940
<211> 153
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e01b1

<400> 3940

tgacgcggac agagtgaatc agagtttttt catgggtaaa cacagggacg aaggctagga 60

ggacaacgac tatgaacttg ggagaactga ccggagccat gacgtccaaa gggattaaga 120

ctgtgcatct aacagcagat gctacataat gag 153

<210> 3941
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e03b1

<400> 3941

ccctcttgta cgcccacgcg tccgcccacg cgtccgccca cgcgtacgcc cacgcgttcg 60

gctccaggct cagatctggg agaacaacca caactaagtg aaatgttggc taattacacg 120

gcggaccagt gagcaaatta aggacatgtt tgagttagta gatatgcatc ctaatctata 180

aaataaatgg atcatatgtc atcccattga tgtgtgtgta atgagtgaat gtatttatac 240

cttctgaata gttg 254

<210> 3942
<211> 120
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e07b1

<400> 3942

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cacgtgactg gctagaccct ggcctagccc aactgaaaag tctggccgca cagaaacctt 120

<210> 3943
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e08b1

<400> 3943

aggggaaccc cccggggagg gcccggccct gatggcaggg gcgacccacc cgtccttgtt 60

tgccggcggg ggggctgaag acggcatacc agcttatgac atcacgagca gtggtaggca 120

cggggcgagg gtgcgacgaa gcgtgacagt gacagctcgg tgcctgtgct gcacagatat 180

gcttaatgga ttaggggggct gggggaccaa catattgtgc aggtctatat gaatggcggt 240

aggaacacaa tgatcccact acggtcccgg tttgagacat atccaccagt gcataagtgt 300

gctatggaaa caatgcgatc tgccgctagc gctgtgcact gaagggttgg ttgggacaag 360

acggactgag ctcacaggca tgcatctgcg aggaggtccg atcagtcgtg cgtttac 417

<210> 3944
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e09b1

<400> 3944

gaaaccccgg gctaggccct ggcctttgca caaatagcgc cccacactag gtagtggttc 60

agactggcgc aggcgtaatt gttcggtggt gtttatggtg actagcttca tctattagtt 120

gatcttttat tccacggctg aggtgcgctg aaaaggagaa atgtacaagc tattcacatc 180

tcccaaaaat ggttgtgggt acgatactcg atttaggcca cggtccagcc cctaaagtcc 240

aatttactaa tagccgaatc atccatacct tccatgggtg aatgcccata cggcagttaa 300

cgataccgat ggggaaccat gactactgtt cacccagtcc caaaccatac 350

<210> 3945
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080e10b1

<400> 3945

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gttcaacggc aattcagcac aaaaggggga aatgattctg taactgacag tttagatttt 120

tgtgatccgt tatgcgagat aaaccgatct aagcttaata ttttagggga ttgccatgcg 180

tgtggcgctg ttatttggtg catgatctga gaagcatgaa gtgtccatca aatctggcta 240

ggtgatcaac taagcattga tcagagacta tcaccaaacc aaatataacg tgagctcttt 300

gtatattcaa aaaaatggcg tttgggtgga gccagacgct aatcaacaag cttggcacca 360

gggagatccc tgggggggatc agaccgttac ggccggacaa ctgtggcagt ttgccccaga 420

tgcggctcta atggaggtgt ggaataccat attggacggc cccaaacgtg aatatcgaac 480

agtgcacggg ctatatagtt agatg 505

<210> 3946
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080f02b1

<400> 3946

gtcgacttta taggaaccgc ctacgccgaa ctgtccttca ctaccaaaat gttcgcgtgg 60

cgaagccttt ttgatgcttg actgcatgaa tcttcaggcc ctggacttgt aggcttttcg 120

gccgcaactg tgactttgtg agcaaacgcg cacgatgctc ttcgtagaaa cagcatccat 180

tacactcttg ccagaaggtt gcggggagac catcatttga tacagggact gcaaaagcgc 240

cattcttgcc catggactcg catgggatag aagaccagca cgtcagcaaa atcgagaatc 300

ctgctgcccc actacatctt ttgagtgccc acgagatcac ggctaatgcc atggcgactg 360

acgtagaata gctgagacta ttaatgggtg agagtagctg ctgttgcgct agactatcat 420

ctgagcgtgc aggtggagtt ttattacaaa tcat 454

<210> 3947
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080f06b1

<400> 3947

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aacatatttg atcaattaca atacatcaaa ttggtaggtt tgatcaaatt agtcatggtt 120

ggccatggac caaattagac acctgtatat gatactgatg tatcttgttc atatgcaaat 180

ccctttgcttg ggttgttgag accaaaaaaa aaaaataaat cagaagaaga aaataaagat 240

acaactgtaa gacattagtg agtttggtac aaaaactata aatgaatgat aaataaaaga 300

aaagaggggg ggggccgttt tagaggacca aagtttacga ccccgggatt gggaggtaaa 360

ttatttttt tagggtcccc taaattgaat taactggccg catgttagca aaaatttgac 420

ggggaaaacc ttgtggttac ccaattaaat aatcttg 457

<210> 3948
<211> 162
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080f08b1

<400> 3948

ttttgttctt gttgtgttta ttcgtatata gaagaagata tgattcaatt ggtgcaaaaa 60

aaaaaaaaaa aaaaaaaaga caaacaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaacaa 120

aaaaaaaaaa aaatctaata ataccacacc aaaataaaag aa 162

<210> 3949
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080f11b1

<400> 3949

ctatattaga gtgttcactt gcaagctccg gacactcaaa gatctctttg tatgttgtaa 60

acatatttga tcaattacaa tacatcaaat tggtaggttt gatcaaatta gacatggttg 120

gccatggacc aaattagaca cctggatatg atactgatgt atcttgttca tatgcaaata 180

ccttgcttgg gttgttgaga cc 202

<210> 3950
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080f12b1

<400> 3950

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cctcctcgcc ggaagcacgt gcgacgctgc ccgcaacctg gccgacacga cccccacggc 180

tgccgctccg gctgctaacg tagtacctgg cctgccggcc gagcccacgg acacggtcac 240

cctgatgcca ccaatgccgt cggtcaccct gcccaccgtg ccacaggtga cgctgccgac 300

catgccggcc atcgtcgtgc ccaaggaggt actgccaccc atgcccaagg tgaccctacc 360

caccgtgccg tacgtcacca tggcgcccat gcccgccatt gtcgagccca aggtgacgct 420

<210> 3951
<211> 220
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080g01b1

<400> 3951

tgctttttc ctagcatcct gctgatgttt tcactggagg cagcgctcct cgtcgccggt 60

cgcacctccg ccgtcgacga agtgggcgcc attctcctgc cgagccaagg ccaagaggaa 120

gcagccatgg cggcggccaa gaagaggccg tggaagtgct gtgaccaggc ggtgtgcacc 180

aagttcatcc cgccgatctg cagctgcatg gaccaaggtc 220

<210> 3952
<211> 297
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316080g02b1

<400> 3952

gcatcttggt ggtgctatac aagtcagtta taaatgatgg gcttcagctg gacatgaaac 60

atgcccgagc tcttgaaaag gaaagagctg tcaactatta caatggcatg acaaaggagc 120

aatttgcaaa tatgcagaag tttatacaag gccggagttc taaagcacca tcgaagttgt 180

agatgcggtg ctctgtgtgt atgtgccttt ttattatatg gctcctttta ttataaagct 240

tgtggaaatg tcaaattgct actcctatta ctggaagacc cacgttgttn tactttg 297

<210> 3953
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080g07b1

<400> 3953

aggtcttccg ccgtcgcacg caaccgaggt tttttagccg ctagccggct cactagtgga 60

tcatgggtta cagatgcgca attgtcatgc cggacctctt cgataggatc gagctggtgc 120

aactgacagt gccatga 137

<210> 3954
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080g10b1

<400> 3954

tttttgaaaa aactaaaaac attgccaagc acaacgagaa caactcagaa tctagggcta 60

ggaaatgaat ctcccgcagc ggcgaataca cctataccta cgttggtctt ccgactcctt 120

cttctcgccg cagttccggc aacccctgtc ccactaccgt aggccatccc cttggtcgat 180

gggcgctcaa ttttctaccc actgcccggg tcgctagtga acacccctac ggcgataccg 240

tgacactccg ggcccaagcc ctatgctttc ctgatacttt ttctgccgga tgccttctgt 300

ccattgcttt catactgaca gtgaagctcc tcatactccg aatttgttag cttgatacgt 360

atacccaact ctgtcattgc tgact 385

<210> 3955
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080g11b1

<400> 3955

cgggtgcggc cagaccagaa gatccaggtt tacatgatcc aacctgcgac gcgcttgcat 60

gcg 63

<210> 3956
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080h09b1

<400> 3956

cggaggcatt gacgcctctg gccgctacac gaaaaacggg tagtctaccg gcaatccgac 60

ccgggagtac acgatgaata aagccgcacc gttgacgctg ctacatgacc cctgggagta 120

cctgctcgcg caactgctgt gatcatgcga cc 152

<210> 3957
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080h10b1

<400> 3957

gcgttgatgc ttgcgtacgt agcccttgat tatgagcagg agctggagac tgtcaagaac 60

agatcctcgg ttgagaagag ctacaagctt cctgatggtc aggtgatcac cattggcgca 120

gagaggttca tgtgccctga ggtcctcttc cagccattca tgattggcat ggagtcttct 180

ggaatccatg agacgaccta caactccatc atgaagtgtg acgtggatat catgaaggac 240

ttgtatggca acattgtgct caggggtggc gcaaccatgt tcccaggtat cgctgaccgt 300

atgagcaagg agatcaccgt ccttgccccg agcagcatga agatcaaggt cgtcgctcca 360

cctgagagga agtgtagtgt gtggatcgga gggaacattc tagcctgact gagcacttta 420

caacagatgt ggatattcaa ggacgagtat gacgaggct 459

<210> 3958
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316080h12b1

<400> 3958

catcaaactg tccaccatgg tgcggaaaaa gcgcgtgagt actcgccgaa cggcccgcga 60

gaaaaccaag ggccagttat ataccgggga ccacacgata aacgcccgtg cagaccgcaa 120

aggcattaca acaggcataa ggagcacgcc ggtgctgcca ccgtttctct ggggaggcgt 180

ccgtgactga gggtaaacac cttgattccc cacgatttga tggcagagca accgaacaat 240

gaggccatgg cgacgggtac taaacaagac gcgtagttcc gtgggccaga ggtgaaaaga 300

ggagctggtt gatacgaggc ctattgtatt cactgccctt caatgtacaa cttcatggct 360

agcgaaaccc aatgcatagc ccgacttaaa tgcgcttgga 400

<210> 3959
<211> 214
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a02b1

<400> 3959

ggtatgttta ccaaggttgc ggaggatgag gactaaaccc actgtctgtc gtatcgatca 60

gttataactc aatacatatc tgctgagagc atattgggaa gtcttgcttt agcttattgc 120

tatctactgt tcatgatgtt ccatgacttc ttgatagacg atttgagacg ctggatattt 180

tgttcaagcg cttgaagttt tgacttgttg tttg 214

<210> 3960
<211> 75
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a04b1

<400> 3960

acccggcgac tacttggtat ccggagcggg tgctgaccat gagtgagtta ttaccgctga 60

tactgctgcc tgacc 75

<210> 3961
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a05b1

<400> 3961

cgcactcctt tgacacaacg tctgcgaaaa gggctcgttc gctctacagg gtagccgccc 60

ccttctgccc gccccgatat gaggctgctt cagatgcact ttctgggtgt gctgtagaac 120

gtcaatgagc acccgatggt cagacatgaa actgctgagg cccttggttc aattgcagat 180

catggaaagc attgcgcttt tggaggaatt ctccaaggac cccgatccca tccatgccca 240

aagctgtgaa ggagccctca gcatgctcga gta 273

<210> 3962
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a07b1

<400> 3962

ttcttacatg cggtccttcc tggtgagcct agcctggggt tgtaacctct gggtcctctt 60

taagcatcca catagtgatg atctgtggcc aggagacccc cgagcgacaa actgccgttc 120

aattgcttaa tgtagtgtgc gcccactgcc gatgatagca gaagaagact gccaccaacc 180

cgtgggacct cataactatc cgagatgtgc gcctgcctga tcctgaagaa gagattttcg 240

tcagtgtgca cgatctcaaa gatgcgctag gtcacccgaa ggatcatgtt gacagtgtcc 300

tacg 304

<210> 3963
<211> 150
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a09b1

<400> 3963

gctaatagtg gggagccgcc tctttagatg acgctggttt acttagcacc gattgcgctg 60

ttatctctcc ttgatgaggt cacctcagaa caatacagca ggaccacggt cttcaacgtc 120

cattgtgtgc tatccgagga gttccctaac 150

<210> 3964
<211> 197
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a10b1

<400> 3964

gctacgtgta cggtcgacct tattttagtg ctgaggagag atctataaga gaagattctg 60

ctgaaggccc accacaaagt gagcaagaaa aaaaaacacg gcttggcgtt gctctgctcc 120

ccctttgccc ccctgcggat gcttcgcttc ctttttgtga tcttgggtcg gggtctcctc 180

tctctggccc tgctcct 197

<210> 3965
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084a11b1

<400> 3965

ttgttattga ggctctaggt gtgaaaagtg ctcttctgcg ccacgaggtc gcttatgtat 60

taggtcagct gcaaaataag gctgcttcag atgcactttc tggtgtgctg aagaacgtca 120

atgagcaccc gatggtcaga catgaagctg ctgaggccct tggttcaatt gcagatcaag 180

aaagcattgc gcttctggag gaattctcca aggaccccga gcccatcgtc tcccaaagct 240

gtgaagtagc cctcagcatg ctcgagtacg agagatcagg gaagtcgttc gagtttctgt 300

tcctccagac tcctcaggtg cagcaggagt cctgagccca gcttcggata catactttga 360

tggacctgtc agagtcgacg gttcggtgtg gtagtggaca tgatgtctga atgaagtgtc 420

gtcgcccttt tccggttctt tttcgg 446

<210> 3966
<211> 173
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084b04b1

<400> 3966

gtgactcctt ggggccagac gcgggagtag acgacgggga attattgagc gaagacgcag 60

ctggcggccc acgctgagga ggggaacatc ccacaaccgg agtatagacc gccaggaggg 120

gacgatgatt ctcggtggag cacaccacga caaaggagga actgatcgcc cgc 173

<210> 3967
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084c01b1

<400> 3967

ccctttgttc cgcccacgcg tccgcccacg cgtccgacca cgcgtccgcc cacgcgtccg 60

ctttataaaa ataaaagggg ccaaagaagc ccataaaaaa aagaggccaa agaagccgac 120

caaataaaaa aataaaaaat aatgagaaaa aatagagaag ggacaatgct actatctctt 180

ttccacactt gtgcttcaaa atagcaccat gaccttcatg atagagagtc tcctatgttg 240

tcactttcat atactagtgg gaatttttcct taaatacatt gtcctcgaat ccgactgttc 300

aaaaaaatat aacaaccata ctg 323

<210> 3968
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084c02b1

<400> 3968

acactcggga tcttagacat gcgaacggga gtaaccacga gtgagtcaaa aacgattttg 60

ctgctgccta cccctggaga gaagaggtgc gtgcaacggg ttttagcatg gacgtaaagg 120

gccattgtac tgctcagggc gagaccatga gaaaagacga actgatgagg cagatccatt 180

gcctgaccta acatctaaac cgggaagtca gactgactgg gactaaagaa gaacaggcac 240

tcccctgggc aaatctcaaa tatgagctgt gacgacacca tgcctaagat agacactggc 300

cgactctcaa caagaatgtg agtgtaaaaa cacttacgca acataactca atgatcttg 359

<210> 3969
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084c03b1

<400> 3969

gcggacacgc gacgggacac gcctacgctt gatcatggcc ggatccaccc ccaggttgcc 60

tcggactggt acaagtccga acacctcgta gggatcggca cctccggctc gctggactac 120

actgtaagag cacacacagc aaaagatgaa ccgagtgtac ccgccctggt cactggagga 180

acacatgatc cccgatgata ggcctgacct ctatcaaaga ataaacggcg ctcggtgtgc 240

tactggctta aaagaatctg gtggactcta ggcacctcta tgaaactgag ggtacgtatg 300

acagcactaa gactgataga acgcaaatct cgaacaaata atgcagatta ctaa 354

<210> 3970
<211> 311
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084c06b1

<400> 3970

gtggtcattt ccgactcccg tcgggagatc cgcaggtgcg aataggtcac ggagctgctc 60

ctgccgatcc cctctgacta gaggactgtt ccggacaagg cgctaaggtc gactcgcgcc 120

atccatttct tgaggcgggc gggtcaatga cagaagtact gctgagccct cctacactcc 180

ttgctagctc aacagtacta accagatctg catctagtag gcaccagagg atcatataga 240

ctccaggacg gtgatctgcg agatgagtaa cttgactaga ggacgcacaa tcgcaccagt 300

tcaccggagg c 311

<210> 3971
<211> 235
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084d03b1

<400> 3971

cttcttattg ggagcgcgca tcgggacagg gctaagccgg attatggctc gaagcaacgg 60

cttgctgacc gctatgggtg ccaatgcgag caacgcgttt gactcggagg cactgagaac 120

tcgatgtcta acagttgaga aacacacatc taaggaagca ctgagtgtcc tgctgtgctg 180

gctgggggaa caagcgtgcc cggaccacat actagcgctg acaaaaaaat aaacg 235

<210> 3972
<211> 390

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084d06b1

<400> 3972

gtcactcatc cggcgcggcg gctgcggacg atccagggga tcttatgtga gcatcccacg 60

ccatccacct cctatagggt gacttgagcc acatacactg accgcagtgt cacaccggtg 120

acaatggcaa gactgtgagc tcccccaagt taaccgcctt gcaggacttg caccttatgc 180

cagttggcgc acttgggata aggtccaata cgcccgccct gtacaacatt tcgcaacacc 240

tgaatggcct gtgtggcgag tgctgcgcgg gctcattaag cgcaataagt gcggcggttg 300

cgctcagtac gaccagtgcg tctcgctacc atcgtaaagg ccatatcgtt aagtgacttc 360

gctttctttc ctgccattat cgcccagttt 390

<210> 3973
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084d07b1

<400> 3973

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atcccccacg tctagtgggg ctgttattta tttcgggaag tggattggag tgttatgaac 120

gtggtttctg gacgagagac agcttgctga aggattattt gagagccgga gtgatccggt 180

cagcgttaca tctgtaaggc acttgcaatt gtactgaaaa ggctgagtat gtgtgatctc 240

atagaggaaa agctgaaaga ggagcttgat gacacgaggc ctaatatttg aactgggggg 300

cgtccgatct agagga 316

<210> 3974
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084d10b1

<400> 3974

gtgattcctg cctaccgggg cgcggcatcc gaccagggtc agcctgcact gcgagccgtc 60

gacccggccc acacctgtga cggtgcacca cgagtcggcc ttcgagcgcg caccctgggt 120

catcgttctc aaatactggc acccaggatt aaagaaggcc atgcactcct gcccctacct 180

gcagcacaac ggcgtgaaga ggggcgctgg ccccggggac acaccagaac atccgccatt 240

tggggcactt gatgtaaaag agtacaccgt caacacgagg tttattcttg acccaacgcg 300

tggagctacc aggagctgac g 321

<210> 3975
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084e01b1

<400> 3975

ctctcttttc cggtgaccgt attggctatg tccaggtccc acaacggatc gagggcattg 60

atccatcaca tcgctacgcc aaccacaaca ctgccttctt tgatgtcaac atgcgtgcat 120

tgtacggtct tatgggacca gtctatgtcg gcactggcat gtctgttccg ccgtgttgca 180

ctctattgat atgaccctcc acgctccaca gaacacggtg gctgctgaag ctgttgcttc 240

ccgaataagc gcacgatcaa gagcactggt tgctaaggta catatgatga gacacgggct 300

ctgctcatgg cagactttaa tgatgaggcc atgaacatgc caacatttac caagaggttc 360

ggtaactcaa acttgctcat taactctatc ccgattgccg agttacaaag gcgccctgtt 420

gctgatcacc ctggcgtcaa gaatggccgc ccttctg 457

<210> 3976
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084e03b1

<400> 3976

atgtcgttca ctgtgctact acatgtcagc ccactgctat gaacgtttca ttgatatttg 60

agttcatata actgaagagg aaagataaaa aagagacccc taaaatatat cgaacctatc 120

cgagataata ctcacgtaaa agaaaagaag aagcaaaaat ggggcggtgg aatatatgga 180

gccaaggttg ctacctcgtg gtttctagat aacaagtttt ctttaaagac aactaaatta 240

tattcattcg cgcagatggt tacacgttgt aaactggaaa aacactggaa ttgccgaaca 300

taatcgcata gtaagattga accattagcc tcaaccgggg gcttaagaaa taggccccaa 360

cctatggcct cttcgcaaca gaaggaggat cgaaactgtg aatgggactc gcc 413

<210> 3977
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084e09b1

<400> 3977

attggtttac agctacacgg acacttcagg gaaccctcgt gggttcctca ggatcaggct 60

ttgagtggct catatggcat ccacgtggta atttgataat tgcaggatca gaagactgta 120

acgtatggat gtggaatgct gaccacaatg cctttctgaa tacgtttgct ggtcacagta 180

gcacagtgac atgtggtgat tttacccctg atggtaagct tatatgtagc ggatctgatg 240

atgcaacatt gaggatatgg gaacccaaaa gcgcacaatg catacatgtt gttcggggtc 300

atggctatca tactcaagga ttgacatgct tagccattac tccggactcc caatcaattg 360

ttagtggctc ggaggataat tctgtgcaca ttgtgagcat aatctcaagc caggttgttg 420

ggtcattaga tggccacacc aattccatcc ggtgcattgg catctaatcg gggtacaact 480

gtgtggctac agggagcttt gtt 503

<210> 3978
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084e11b1

<400> 3978

tggtactacc gcggaaacgc aacgggtaga tcacgaggat taaatcagca ccggtgctgc 60

tggccgcccc ccctgaggag cctcatccac cgacaagcgg taatcataag ggggcgcgcg 120

catattaggt cccatgagga ggcctccatg acggatgatt aaaagtgtgc ttcttcgggg 180

atcgatggta aaacaactgc acccgtgttt aacaaccgag ggcgaggaaa aaacatgggg 240

tgccccaagt aaaagacctt aaaaga 266

<210> 3979
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084f02b1

<400> 3979

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catgataggg tcacgtaaat gcaactcgct ggcccttgga ccacagcgtc cagactgaaa 120

caagcctggc gtgcctgatc atagatgaac tgcaggacat gctgctttca gcagcgggac 180

aaatagccaa gagagccagg ccgaccgtca ttgccaacag aagtgcagcc ttatttgcca 240

gagctacacg actatgttta taacactaag cgcagagagt gggatgtggt tacgctcata 300

ca 302

<210> 3980
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084f05b1

<400> 3980

gttatattta aagatacaga agcgtgagaa aacaaggaag catttaaaac c 51

<210> 3981
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084f08b1

<400> 3981

ttcttgcgtg cggatctgtc tcgtgggcct actacgattc agtgggtaga agccatgctg 60

ttggctgcca cggatgagga cccggtgatc caaaaggtca aagtacgggc tgttcgaggc 120

cacaatcttg tgatggggaa ctcactgaca cagaccaact agccctaccg tctcctctgg 180

ttgggttaac agaaggagaa gactatcatt cagaagaaaa atgacaaaga attatggaat 240

gatgtattgg agcttactga gacaaatcct acacaggcag tgaaactttg aggctgtgat 300

gaggattaca ctacagcggc tgacaacacg ggagtggatg caacaaaata acttggatct 360

aaagacgcgc aaagccggat gtaaagcatg c 391

<210> 3982
<211> 94
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084f09b1

<400> 3982

gctactccca cggacccgga gcgggagaac agggagaatt aaatagaagc gggcgtgctg 60

caggctgccc ctgatgaatc acgaagccga tcaa 94

<210> 3983
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084g01b1

<400> 3983

gtgtttttg gagagccgtc gcgctaggtc atgctggagt agttacgagc ggtgccgctg 60

ttacacttcc catatggggg ggaatcgatg caactctgtt ggcaggggat ccaaagaccc 120

acactgattc ttgcctggag ctgatgacca aagacgcact gagtgctatc cttgttttga 180

tgtttgaaca aatggagcag agaatcatcc tgacagcacc taaagaagat gtgcaactcc 240

gattacgaaa gatgaaagag gagtttcgtg acaaaaagcc caagctcaga gctgactgag 300

cctatacact gcgttgacta agaaaactct ggagacaacc cacata 346

<210> 3984
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084g03b1

<400> 3984

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tgctcgtgca tgccactgaa gagttcttgt atggacaaat gtaagaaaaa tggaccggcc 120

gggccattag aacgtctgtg agtgagaaaa tgacgaaaga cgaacacgat agcccgcctc 180

agctcactgg gtgaacaaca gaaccgggaa gacagactga aggcgaccaa agaagaactg 240

ccaccacgtg tgcaagatct ataagaagag ctacacgaca cgaggcctaa cattgag 297

<210> 3985
<211> 114
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084g04b1

<400> 3985

gatctatttg tgttttaaca caacagtgat gtagttgcgc gttgaaattg aagtgtacat 60

tcgatcgaaa aaaaaaaaaa aaaaaaaaga aaaaaaagcc aaaaaaaaaa acat 114

<210> 3986
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084g06b1

<400> 3986

tcggctatct ttgcggacac gcgtccggag ttcaccatga tgaatccagc tccgatctgg 60

ctgttgattg acccagttga gctcccgggc gcacaactgg cgcaaggatc gccgaggagg 120

aggactagag ctctccggtg gattccgtta cgaaggatga actcgagtgg acgtctacag 180

tcgttgggtg aacaaatgga ccagcatatc ggcctgactg tgacgaaaga ataactgacc 240

ctcctggtgg cagtgctgaa gaaggaactt gacgacacca ggcctacgac tggaaatgtc 300

cgctatatta caacctaaag actgttaaat agccgtcgtt tcacaactta atgactgttg 360

aaaaccatgc cg 372

<210> 3987
<211> 93
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084g12b1

<400> 3987

gctactcctg cggatacggc tcgtgagagc acgatgtttc agttagtacc gttgatgctg 60

gtggctgccc ctgaagagtt cgagtgcagt caa 93

<210> 3988
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084h04b1

<400> 3988

cgataatgct tgcgacttcc ttttgccacc atagcgacag ataaatagat caaatttggc 60

aacgtcatac acactgattg actggtaaag agctgaggac acccaacgta gtagctttca 120

aggctacccc atttgggtca gcatgggcaa cacccaactg gcctgcgctg atctggccaa 180

gcaccagttc tcccagttgt agggcttatg gaacgacttc tacaacagag gactaagttc 240

caacctggcg gtg 253

<210> 3989
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084h05b1

<400> 3989

cctatgcttt cggggctaac gcgggggcc acggtggaga ggaaccaagc ttagacccgc 60

gagaatgcca cccaagagct caacaataga ctcatgtaaa aaacaggaac agcacgcaac 120

cctacaacga tgtatctgat tgatccatga gggaacccaa caaaatcggc ctactgcaca 180

aacaatgagc tgctgctaac aaaaatctag cccaagcctg aacaaaacat caacgctaac 240

aattgaggag gcacttttgc aaaagatacg cgcccaaccg ccatatatta attgcggcta 300

atacagtcaa aactctcacc gttgacgata caattacca 339

<210> 3990
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084h06b1

<400> 3990

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cctgctatgg tgttgacctg gcgaatggcg ttaatgataa caagaggcac gcgggggtac 120

tcgtataaga tctcaagagg aaagatgaat ggattgaaga gactacgaac aacgggtaaa 180

gaattggaca cggatagtaa gattgatgaa gacaaaaaaa aaactggcgc cgctctagac 240

aatgcaaaca taggagcgcg tggatacgag gt 272

<210> 3991
<211> 313
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084h07b1

<400> 3991

gatactaccg agcttgaaca gcttgacatg gcacagcatc tttggggacc ggtgccgggg 60

ttcggttttc atgaggcgtg caaccttaat tgaatgtggg agtgaaccgt cgaagaggcc 120

cttaactgca ttatcctggc aagcagacct gaagagaagc tgattgcctg cgacatgttg 180

cagagaaaca cctctaccta aggagaaaga ctgcttgcga gcacaaacgt ttcttgacat 240

gctgggcagg tattcgagat ggcttatgga gaaatatgat cctatcaagg agcaaggggg 300

gaatgaactg tgc 313

<210> 3992
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316084h09b1

<400> 3992

gctactcgtg cggacccggt ctagatgacc agggggcttt atacagcagc gacgctgacg 60

ttcgcggcca tggcacgaga cagctctgct ccactgtcaa tgaaatacac ctcagtgacc 120

cttgtcttac aacgacttgg ctcacagacc gctgatctca cggaactcaa ttgcccttat 180

gttcatgccc agttaaccag cttgccacat ttcgaggacg cacgagccaa tcggccttac 240

cgtcaggagc ccatcattta tgccgaattg gacgcgccgc ctaatttcgc agccagcgct 300

ctctgtgcgt tgaatacact catcgtgacc ggtac 335

<210> 3993
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a06b1

<400> 3993

cggtcttttg ggggaatgag tacagtgtaa atccctaaac aaggatccat gggagggcaa 60

gtgtggtgcc agcaggcgag gaaattccag ctacaatcgc gcatatgtaa gttattgcac 120

atacaaagct tgtggttgga ccttgggccg gggaggacgg tccggctcac ggcgagcacc 180

gacgtactcg acccttcggc cggcgatagc gctgctagcc ttaattggac gggtcgtgtt 240

tccggcatcg atactttgaa gaaattatag tgatcaaagc aagccattgg tctgtataca 300

ttaacatggg ataacatcat aggattccgg ccctattgcg ctggccttag ggatcggagt 360

aatgattaat atggacagtc ggcggcattt gtatttcata gtcagaggag aatttttttcc 420

atatatgtaa gacgaacaac t 441

<210> 3994
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a07b1

<400> 3994

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gtgtctgacc gtgatgaggc cctctccttt caactagggt gatgatggag aatagcgccc 120

attgcaagat tgcggaggag tccatgacca aagacgactt gattgactcc cgtacgctcg 180

ctggtgaaca acatgaaccg tgatgatagc tctgactgtg actaaagaac aactggcgct 240

tcctgtggaa gagctacgag aagagctaga tgacacgagg cctaaactgg atatgtggac 300

attcaaaa 308

<210> 3995
<211> 289

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a08b1

<400> 3995

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ataaaataaa catatgatgc actctaactt taaaaaaagg agaggatggt gaatagcacc 120

cattgcaaga atgcggagga gtccatggac aaagacgaat atgagtaccc cctcatggtc 180

ggatgtgtga aaaaatgaaa cgttaagtca ctctgagcat tgactaaaga acaactggaa 240

cttccggcgg aagatcaaag agaagagcta gataacacga ggcctaatg 289

<210> 3996
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a09b1

<400> 3996

cgtgcggaac cggggctaga gtggaccaag attcaggcac ctgtgactat gaaggtgtct 60

ctcctttatg atgcactcta atttacaacc aaggtgatga tggtgaatag cacccattgt 120

aataaatcgg tggagttcat gaacaaagac gactagggtt gcccctcgta ctgtcgatgg 180

ggaacaatcg taacgtggtg tcattctgac tttgactaaa gaataaatgg ctcttccgtt 240

ggaagagcaa cgggaagatg tagataacat gagtcctaat ctagatacgt ggaaaaaaag 300

aacaacgtcg ttattgggaa aactctgaag ttacccaact ctattagtct tgcacaacat 360

tctccattcg ccacctggcg taatacataa gatgctcata gcgaaagttc ctcctaacag 420

ttgcttatga tgttta 436

<210> 3997
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a10b1

<400> 3997

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ggtgtatcac cttgatgatg caatctcatt tcaactgagg tgaggatggt gaatagcgcc 120

cagtgtgtga aatgcggcgg agttcatgaa caaagacgac tatggttaca cccgtactgt 180

cgatgtggga acaatacgaa ccgtggtgtc agttctgagc tgtgactaaa gaataactgg 240

atcttccggt ggaagagcta cgcgaagatg ctagatcaca cgaggccta 289

<210> 3998
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a11b1

<400> 3998

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gtaacaaact ccgatgataa cgctgaagct catgtaaaga aacagtgaaa ccattgacct 120

tgtctttaat tactcccgcg tggatgaatt gatccaatta aataactatg ctcccctcgc 180

cagagtgaaa caattagaaa gac 203

<210> 3999
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085a12b1

<400> 3999

tttttctgtc cggcgccggc ggtggagctg atcccggttc acgtacgata gcaagggcag 60

gaagctgacc atgatggtga cgacgacggt caactggcca gaccactgcg caccagacta 120

cgtgtcatac tacattggcg ttaacgacgt gaggaagcct tagtcctagc cgttcatcac 180

cgggttaagc attgaatagg aggtggactc gtactactgc tccaaatact actgccgctc 240

ctgctgcaag tgctactgct gctgctaggt gagatcaaa 279

<210> 4000
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085b03b1

<400> 4000

gctttgtttt ccgcctcggc gccagagaag accacggggg attcaacagc gatgacgccg 60

ccggccgcct cagatgagta cgcgttcgca caatttgtgg atgtcaggac tattcccgcc 120

atagttcact aagtgatgga gtcctttgac caaagatgaa cttgatgtcc ccctccgatt 180

gtctggagaa caatagatct gagttgtaag ccctgattgc gactaaagaa gaactggcac 240

ctacgattgg cagagcttat agaagatgtt tgatgacatg aggccgaaac ttggcactgg 300

ccgctccatc aaccatcgcc tgactgtgga acaacactcg agctccccaa ctttaattgt 360

cttgcagaac attattttt 379

<210> 4001
<211> 142
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085b12b1

<400> 4001

atccggagcc ggcgctgtag atgaaccaga atcaggtacg cttgagtgtg aaggtatatg 60

tcctatatga tgtcacctaa tttcaattta atggacgatg atgaataacg atatgtgtgt 120

gaatactgcg gcgttaacga at 142

<210> 4002
<211> 529
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085c01b1

<400> 4002

gtgctttcgt acgtgagccc tagcgggttc gaggaggcag cgccggcggc ggagatgtcg 60

acgccgtcga gaaagcgcct gatgcgggac ttcaagcggc tgcagcatga cccaccggcc 120

gggatcagcg gcgcgccgca cgacaacaac atcatgctct ggaacgccgt catcttcggg 180

ccggatgata cgccatggga cggaggcacg ttcaagctta ccttgcagtt tacagaagat 240

taccccaaca agccgccaac tgttcgtttt gtctctagga tgtttcaccc aaatatttat 300

gcagatggga gcatctgctt ggatattcta cagaatcagt ggagccctat atatgacgtt 360

gctgccatat tgacttctat tcagtccttg ctgtgtgatc caaaccccaa ctctccagca 420

aattcggaag ctgccagaat gttcagcgag aacaagcgag agtacaaccg caaagtccgc 480

gagatcgtgg agcagagctg gactgctgac taaggcaggg cgaggccgg 529

<210> 4003
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085c04b1

<400> 4003

gtgtcttttg cggatccggc gcgtgagaag agcgtgagac atttagcagc gttggtgctg 60

ccggctgacc cacatgagtc agagt 85

<210> 4004
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085c12b1

<400> 4004

ttctcatgtc ccgagccggc ggtatagacg acccagattc aggcacgctt gattgcgaag 60

gtgtccctcc tatatggtgc cacctcatca caactggctg gacggtgttg accaggctct 120

agtgtgtgaa tgcggacggc gttcatgaac ta 152

<210> 4005
<211> 138
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085d01b1

<400> 4005

gcgactagtt cggaaacagc gcgagagacc accgagaggc actttgtagc gattatgctg 60

gtggctgtct ctgaggagtt caagtatata caacaggtgt gctgatggtg tattcattgc 120

cattagtggc atctgtag 138

<210> 4006
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085d05b1

<400> 4006

gtgataattg gcgaaccggc gcgggagtac accaggaagt agtcagcacc gatgttgctg 60

atggctgacc gagatgagtt catgtaagaa 90

<210> 4007
<211> 127
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085d11b1

<400> 4007

ttcttttacc gctgatccgg cgcgatagtt gaccaagatt tattcacccc cgctgacgct 60

gctggctgtc cctgatgagg tcatgtccga acaactggct gtaccatggt tccatatcgt 120

cctttgt 127

<210> 4008
<211> 128
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085d12b1

<400> 4008

ttctctcgtg cggagccggc tccggagatg accctgatac agtcagcatt gatgacgcag 60

gcgtctcacc ttgatgaggc cacgtcaata caactggctg tgaccatgct atattatggg 120

cccagttg 128

<210> 4009
<211> 84
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085e02b1

<400> 4009

tgacgtcata tcacctatat agggccacct aaaatcaata ctcggttcga cgtgatacta 60

cgtccaatcg tgtatatacc gagg 84

<210> 4010
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085e04b1

<400> 4010

gcgttttatg ccgaaccggc gcgagagtac accaggagtc agttaccagc gacgtcgccg 60

atggctcacc ctgatgagac cgtgtacgat caactggcgt aataaaggac gttacacaca 120

ttcgttttat atctgaggag gacacgacca aagaagaatt tgtttgctct cctccgctcg 180

ctggttgcac aacaagtaca gtgatgacca gcttgacggc gctcaaagaa gaactac 237

<210> 4011
<211> 81
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085e11b1

<400> 4011

tgaataccac cgccgctacg gcgcaggaga ccaccatgat tcagacacca ccgatgatgc 60

tgattgccga cccagaggag t 81

<210> 4012
<211> 70
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085e12b1

<400> 4012

tgtttccccc cgacccggct ccagagaaca gccggattca gtcagcctag agggagcaga 60

tgacgctcct 70

<210> 4013
<211> 525

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085f03b1

<400> 4013

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tacgccataa agggcaggtc ccgcgcgccg accacgccca ccatcttcaa agtcaagaaa 120

ttcaagatga aggccccctc gaagctccat gaagttccgc ttcagaacga tgaaggacgg 180

acagatccgc aggtggaggg ccgtcaagcg ccacaacgca caccaaaagt ccaaggaagc 240

aaagagaaga ctccggaagc ctgctttagt gcatttagct tatgccaaag ttataaagaa 300

gctcaacttc tgcggttagg aaattgatgg atggaggatg gtgattggca catgaatctg 360

atcaatgaat actgattgcc aacttatctt ggtacatttg ttcttttgat gcattgccat 420

cagatttttg tgctcccatc tcttcaccga tgccgatgat tattttattg tactaccatt 480

cacttgtttt ctaaacaatc agttgataaa ggcttccctg tgttt 525

<210> 4014
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085f04b1

<400> 4014

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ctggtttacc gatatgagta cgcgtacttc caactggtgg tagtaaggcc ctatctggac 120

atagtgtttt tatggaggag gccctgacta aagtatgatt ctgtttgccc tcctccgttc 180

tctgggtgaa ctaacagaat agtgatgtca gtctgacagt gactaaagaa gaaccgtgtc 240

ttcgtgtgga atagcttata gaggagtttg atgacacgag gcctaaactt ggcactggtc 300

tgctttaatt aaacattttt actgtaaaaa ctctgttgtt accccactta atcg 354

<210> 4015
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085f07b1

<400> 4015

ttgtcttttt gaactcagag cttaagttcg aggaatattg atctgcgtat ggtgaacatg 60

caatataata caagagaagt caaatcaaaa 90

<210> 4016
<211> 66
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085f12b1

<400> 4016

accagcgagc gaggagatag ctatcctata gggggacctc actctaaaac actggacgag 60

gtggta 66

<210> 4017
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085g10b1

<400> 4017

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atggctgacc ttgatgagtc cgtgtcctca caactggcga aatctatggt ccttcggtgc 120

cattgttcgt actgtggagg agtacaagac cataagatga atagtatagc cctcctccag 180

atcgttggtg tgaacaacat gaaccgttga cgtattcctt tgactgtgta ctaaatgaac 240

aactggatgc tctctggtgg ctagagtcta taagaggagc tttgatcgac atctagggct 300

a 301

<210> 4018
<211> 102
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085h01b1

<400> 4018

gtgatctttt gggcgccggc gcgggagcaa accatgattc actcacatgc gacgatgcag 60

ctggctgacc gtgaagagtt cgcgtacgta caactgcggt ga 102

<210> 4019
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085h03b1

<400> 4019

gctttcatct cggacccggc tctagaggat gaccaggagg gagtaactat cgatgatgct 60

gcagattgac caatgatgag tttat 85

<210> 4020
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085h08b1

<400> 4020

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cgggttccac gtgatgagtc tcctatcgtg caaccgaagg acaatatggt cgctcggcgc 120

tctacagatt tttgacgtgg aaaacatgag tagtgaccca actgaaagcc cctcgtacga 180

cagctgcgtg atacaacagg agccgttata acacatcagg cgcggaccga agaacactct 240

gcaactattt gctgagacag attcgagaag gggacgatca caggagcggt gaactaagca 300

ctgcgcgtgt gttggcaacg ctcagactga caaaaccacg tggcaa 346

<210> 4021
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085h10b1

<400> 4021

tttttaactg cggacccggc gcgagagatc accaggaatt agtcagaacc gttgacgct 59

<210> 4022
<211> 365

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316085h11b1

<400> 4022

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tggctgaccc ataggagtac gtgtatgata caactgggga aatcaatgga cctacgtgga 120

atttgttaat atgtggagga gacccagtcg aaaggatgaa ctgattgtcc cgctttggtc 180

gcttggtgaa caacatgaac cgtgatgtta ccttggctgt gaccaaagaa taactcggtc 240

ttctggtgga agatctgata gatgagctat gatcacacga ggcctcaagt ttggtctgga 300

cgtatttaaa caaccgttat tactggtaaa actcttacgc ttacccacta ttgccttgta 360

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<210> 4023
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a06b2

<400> 4023

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ccaagggcaa aagacagaaa caaggaagcc gacggcgacg ggcggaaaca aact 114

<210> 4024
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a08b2

<400> 4024

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ggtaatgatc caactcctcc ttcagcatct gctctgcagg caatagtgtg gctgcgcctc 180

caatttatca tcaggctgct tcaagtaatc ctggcagata ggggcatgag gcatacactt 240

gctcctgcga tactaagcct gcttgcggca cgcataatct atgaagatgc agattcgccc 300

cttcctcctg ccagtttgat tgcctcgaga cgggaagtgg actctttgct ggaacctccc 360

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tgcgctgctt ggcattgcaa accaagtgga tg 452

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<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a10b2

<400> 4025

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agcagcagca gcagcagtgt accaaagaag caagaagtga tgagggtgga tccactgggt 120

aggcgcactc agttcattga caacctcaag acgctgtttg aagatcttct gatggagttc 180

aacgtgaagg gcgctgacac taggaagttc ctggaagaca aggtgaagaa gaacctgccc 240

gcagcctgaa gactgcggta ggagataatt tgcctggtaa tgggggtgat agctgcaggc 300

tccgtaacta gaaataggta acaaggtggt ggtagtagtt tgctttccta agtgcaggga 360

aagttttg 368

<210> 4026
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086a12b2

<400> 4026

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tgcagttcca cgggttccac ggcgtgaagc aggaggagaa gaagctgggc cagaagttcg 180

tggtcgacgt ggacgcctgg atggacctcg ccgccgtcgg ggactcggac gacatcgccc 240

acaccgtcag ctacaccgac atctacagga tagccaaggg cgtggtggaa ggcccgtcgc 300

gcaacctctt ggagtcggtg gctcagtcga tcgccgggtc cacgctgctc gagttccccc 360

agatctccgt cgtccgggtg aaggtcggga agccccacgt cgcggtgcaa ggca 414

<210> 4027
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b03b2

<400> 4027

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cactgccagt gcggtcactg tcaggagcac tatccgtcgc ttgagggagc agactgaagc 120

ataagttgct actagtgttt tgtcctagtg aatcatctgg gattttgcag tttagacgat 180

actttggatt cagttctgtt ggctgtttag tcaaggatta tctttgtact tggtgcg 237

<210> 4028
<211> 540
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b08b2

<400> 4028

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caagtcgaac cagtacgaga cagcgtcgct ggtgcagatc gagggggtga acaccaggga 180

ggacgtggcc tggtacggcg gcaagaggat ggcctacgtc tacaaggcca agaccaagag 240

caacggcacc cactaccgct gcatctgggg caaggtctcc cgcccccacg gcaacaccgg 300

cgtcgtccgc gccaagttca cctccaacct gcccgccgag gccatgggga aaaaggtcag 360

gatcttcatg tacccgagca gcatctaaaa ggttattttg aagtctggag ggtttcgctc 420

gtcccttagg tttcatttcg agtcatgtaa gatggattca ggccgggata agcatgtgaa 480

ctgctgttcc ctgtgaagac tgtagtctca tgtattctga tgtgtggtcg catatatatg 540

<210> 4029
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086b09b2

<400> 4029

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gctcccctgc cccgccaagc aaggatgact acttcaaggc gtcttgctga caggaagagt 120

gcgaagtttc agaagaacat cacaaagagg ggctcagtgc ctgaaactac tgtgaagaag 180

gggaatgact atcctgttgg acctatcgtg cttggattct tcatctttgt ggtcatagga 240

tcatccttgt ttcagattat caggacagct actagtggtg ggatggctta atatcgagct 300

aaaaacaaga ctatcattat cagagattta ttatccatgt gattgggagg caatatcata 360

tctgtaccct gtatcaaact tcgaccctga tgatgttatg tagagattta aatcttgttc 420

agtcatgttt a 431

<210> 4030
<211> 530
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086c01b2

<400> 4030

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ttacaagaca aaagatatgc aagatggcaa cacagaacaa tgtgtaattt gtcgtgtgga 120

atttgaggaa ggtgaatctt tggttgcact tccctgcaat cattcatacc atcctgactg 180

cattaatcag tggcttcaaa taaataaggt atgccctatg tgtagcgcag aagtttctac 240

ctcagcaagc aagcaggcat gaccaacagt cgttggtaaa ccaacttcat cttcagaaaa 300

gaaaagaaaa ggaaaaaacc agttgttggc acttggtagg agtatgtagt ggcatcattc 360

tagtatccct gatgtttaaa ccaaaagcaa ggcagcagaa acttctacag tacaaacttg 420

cgaggggacc agggacatgg agcatttttt ttatgccttg ccgctgatgc tctgcgttct 480

cttactcttg tacactaact gtgttattac cgtcgatcaa ttttttcttt 530

<210> 4031
<211> 516
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086c03b2

<400> 4031

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tcctcgcagc cctcatctgg tgcgccgcct acgtcgccgc cgccatctcc tcggtcttct 180

agtcctctct ttctccggca acccaacccc cacaagccct ctccctaaac ctaccccgac 240

cccccattcc caatctttcg gtagcccgac gctgaccatg ggtttcgcgc agctcgtcat 300

cggccccgcc ggcagcggca agtcgaccta ctgctctggt ctgtatcaac attgcgagac 360

ggtgggaagg aggattcata tggtcaacct ggatccagct gcagagcact tcagctatcc 420

tgtatctacc gacattagag agctcatatc actggacgat gtcatggagg agctcgggat 480

gggaccaaat ggcggcctca tctattgcat ggagca 516

<210> 4032
<211> 492
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086c05b2

<400> 4032

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cgtcgacaca gttgaggtgg caacggctga ggctgtggag ccggccgttg tcgccgccga 180

ggaggccgcg aaggaggaag ctgttgcacc ggccgtgacc gagctggcga aagaaccgga 240

ggcagctcca gcggagacca aggaggccga gacagaggcc aaagagaccg agcccgaggc 300

tgtccaaccg gcggcagccg ccgaggaggc gcctgctgtg ccggcagtga ctgagaccaa 360

agagccggta gctgcccctg ccgagggaac agagacaaaa gtgtggagcg tgaggcagca 420

tccgctgagg tcgagaccaa ggaatcagag caggaagctg cttcagctga gactgagacc 480

aaagaggcag ag 492

<210> 4033
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086d01b2

<400> 4033

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gtgtgcgtgg cgtgcctgat cccgctcttc ctcatcccct tcgtcaacgc gctcccctac 120

ctcttcgacc tcctcctcag caaggtttat cgcatgcttg gatgggaata caggaggccc 180

gagagagtcc cagctgcctg cccgttcaag cctgcagcaa acaagactga aggtgtggcg 240

ggtgaatcaa aaccagtagc aaatcctcat gttgcaagtg caaatcctct ggtggaaccc 300

cagagtgcta ccacagaaat gaagaaagat gattagaaca tgtaacgctc gcccgatttg 360

acttatgtga acaactctca ctatttgtat ttgtgactgc gtcgtaaccg agaaataatt 420

aatgtaagat tgtatatctg ggc 443

<210> 4034
<211> 548
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086d02b2

<400> 4034

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gaggtctccc agcactccaa gtacttctgt gagttctgtg gcaagtttgc cgtgaagagg 120

aaagcagtcg gaatctgggg atgcaaggac tgcgggaagg ttaaggccgg tggtgcctat 180

accatgaaca ccgccagtgc ggtcactgtc aggagcacga tccgtcgcct gagggagcag 240

actgaagctt gatcgcggtc aatctgacaa aggagcctct ggattttgta gttcagacga 300

gactcattcg acgcaatata gcctaaattg acaacataca atgttattta tcggcttgtt 360

ggggttctga atgtatccag ctacgttaca atgtgtatct cgtttatcgt gcttagttga 420

ttgtctaagg gtattcgttg tgtgtgtcgt tggttcttga atcttaaagc tattgtcatc 480

tgttcttaga agaactagcg gggccgcctg tgcatttgtg cttctatttg cattgacttt 540

agctgttc 548

<210> 4035
<211> 381

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086d06b2

<400> 4035

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ggatttgctt attgttatct cttctcacca acggtgctgc ctgcctgtgt aactcgaatc 120

catccatcag taacagaggc tttatgatct taccatcttc aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacaaaataa aaataaaaaa aaagaaataa 300

agaataaaac aaaattaggg gggggccctt ttaaaagaac ccaggtttac ctccccgagt 360

gctacataat attttttttt t 381

<210> 4036
<211> 505
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316086d07b2

<400> 4036

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cgcgaggaac gccaagatcc ccaaggccgg cgacgatggc ggcggttcgg tgcgcggcga 120

ggaggctcgg cggctctctg ctccagcgaa cgcaggcggc ggtcgcggag gagggacgcc 180

tgctcgcgcc aagcaggctc atgcgctccc gccagctctc caccaaggtc tccggcgagc 240

gatcgcaggt ggcggagcga cacctcctcg agccaggcag cctcatgcgc tcccgccagc 300

tctccggcga gcatgctcgc aacatccaga agaaagagga tgactgctgg gcggngttca 360

atgagacgct aaagaggttg gacgagcttc aaaaaaagat gaaaccaagt gtctttcagc 420

agcgcatgat atccatcgac cgtgcgttga agagtttggt ctatggatct ttcaggtgac 480

agttgtgtat gtggctgctg ctact 505

<210> 4037
<211> 381
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086d11b2

<400> 4037

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ataaaaaaaa aaaaaaaaaa aaaaaaaaag aagaaaaatg acaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa caaaaaaaaa aataaaaaaa aaaaaaaaaa aggggggggcc gttctaaaaa 180

aaccaaaatt aactccccgg ggttgccaag taaaaatttt tttattgggg aaaccaaaat 240

aaaatcaatg gcccgtggtt taaaaaggtg ggaatggaaa aaccccggtg ttacccaaat 300

taaaatgcct aggaaaaaaa atccccttat ccccaagtgg ggaaaaataa aaaaggcccg 360

aaaaaaatcg cttttcaaaa a 381

<210> 4038
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e01b2

<400> 4038

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ccaccacttg aattgaacct caagcgcaca gaggaggagc ggtgcaacac tgccaccctt 120

gcaacagctc cagcaacaag gagaagaggc ctcctctcaa gaggggccag atcaaggtgc 180

aaatagccaa gaccctgggc agcctcgtgg tgccgatcgc caggaacagt tttagaagat 240

gagatggctg atggccaacc aagctagaag tgtggtgtgg tgcttgatat gcatagggat 300

tg 302

<210> 4039
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e02b2

<400> 4039

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gctcaatgcc ccgtctcact ggatgcttga caagcttggt ggagcttttg cccccaagcc 180

atcatctggt cctcacaagg ccagggagtg cctgcctctg atcctcatcc tgaggaacag 240

actgaaatat gctctcacct accgtgaagt gcaatctatc cttatgcaac gtcatatcat 300

ggttgatgga aaggtccgca ctgacaagac ctaccctgct gggttcatgg acatcatttc 360

cattcccaag actggtgaga actacaggct tctttatgac accaagggtc gctt 414

<210> 4040
<211> 80
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e03b2

<400> 4040

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gcgcggcgtc tagggaaagc 80

<210> 4041
<211> 484
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086e11b2

<400> 4041

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agccatggtg cacgtcaact tctaccgcaa ctatggtaag acattcaaga aaccaaggcg 120

tccttatgag aaggagcgtc ttgatgcaga actgaagctg gttggtgagt atggattgag 180

gtgcaagcgt gagctctgga gggttcagta tgcattgagc aggatccgta atgctgcaag 240

acacttgctc acactggatg agaagaatcc ccgccgtatc tttgagggtg cggctcttct 300

ccgtcgcatg aaccgctatg gtctccttgc tgagggccag gataagcttg attacgtcct 360

tgccctgact gctgagaact tccttgcaag gcgccttcag actcttgtct tcagggctgc 420

atggcaaaat ccatccacca tgcccgtgtc ttgatcaggc aacgccacat cagggttggc 480

aggc 484

<210> 4042
<211> 228
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086f03b2

<400> 4042

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ctgctgtgga gtggatgaca aaagataaga tgaacggacc gctccgct 228

<210> 4043
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086f06b2

<400> 4043

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tcacatattc gtgaccaaca ttatcatact gtgcatcgct cttcttctat ccttgtccct 180

ggcgaggcta tcctggacca atgcttgtaa ttccacaaac ttgtaatgat ggtcggtgcc 240

agccttgtct catctacaac acccatgttt cgaggaaaaa aaatgatggg ttgattgaga 300

aaaaaaaaat taaaaacata ag 322

<210> 4044
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086f07b2

<400> 4044

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tcctgagcgc gtcgccggcc gacatcgcgg ccggcgccgg cgccggggcc agctgggctc 180

ggttctcctg gcaggggagg aagctgcagg acgacggcca ggccagagca gggcaagagg 240

ggaagcaggg cggtccaccg tcggaggcgg agcagcagcc ggacaagggg agatcgccga 300

cgtt 304

<210> 4045
<211> 480
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 4045

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ttggtttctc atctttggct ggtgcaccaa atctgttggt attggagcaa tttgataatg 120

tattgtccag aaaagtaaat gaagttgtga atgaaataag gcgacagaga tgctcctacc 180

taagactgag actatgccaa aagggcgacc catctggaga tttcttccgt tccctgttgg 240

ttgaggacaa agcacccggt ggcctttctt atgtagagtt ccttgtacat gttcacaggc 300

aaatccagag caagatgacc tgacatgacc tgcttcattg ttgtgatgtt ttggttggta 360

gacatcatga cggactcgat ttctgcatgt ggatatacaa aaagggaaca acgtttttct 420

ttgtaaacac agctatagca gatttgtagg attctagtcn ttgatttaca agtcagtttg 480

<210> 4046
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086g06b2

<400> 4046

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ccaagacggc gacgacggct cggaatctcc cagggccgcc gttcccctcc attccaaggt 180

tggttcagct gtgaaaaccg ggttctggac aacggtagac atggcgagcg ggcggtacct 240

ttggcggacc cttgttgcgc caccagcgaa ttctgaatcc gacaaggcct ggtgacgacg 300

aacttcatgt tgtctgtttg acatttgtgt aatgcgggag acaagggatg tgatgtgcga 360

tacggcggtg attgtaaata tgggttttct ttgtttaagc aaatgtgcaa attgttcatg 420

cttgagcccc gtgttatatg ccaggactgg attattttg 459

<210> 4047
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086g09b2

<400> 4047

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gggcatccgg ctcgtgctcc agtgcgtcga ggagccgcac gccgccgtct tcacccagga 180

gctggagaag ctcgcctaag agggcttgcg ttcgtcatgg ttacctccat actttacaga 240

attattacag gtgggatttg gagttgctgt tgttgttgta ttcttcatct tgttgtgtgt 300

tgtagttgtt gtattccaca ccaggttttg cttccaacaa acaaataaat cactgagggg 360

ttcttctttc tttgtgtctg tatacttaca ttgtacatgt atttgacatt gtgaatcagc 420

agaataatgt catgtgttcc caggtg 446

<210> 4048
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086h03b2

<400> 4048

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ggaatcttat tgctgatcat cgccggtcga tcgatcatgt ggtggtggtg gctgctcgcg 180

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aagtggaacc tgccagaagg acattccact gctgtggcat cgcacgcggg ctaacggagc 360

gtgcatatgt atgtaaatta ctattatgaa gg 392

<210> 4049
<211> 527
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086h04b2

<400> 4049

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cgccggcggc gtcctccggc gtcgacctgt cggaggtgct ccgcctgtcg tgcgagatgg 240

cagcgccgct ccaggtccgg gtgcgcccga ggaggtgctc cgcctgatgt ggctctggcc 300

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cccgtgcttc acgaaagtga ataattaagc tgccggtgta aaatgtacgt gcgccgggcc 420

cagctcagct cagtggttgg ttcagagttt ctttctaact tgtgtgatgt gatgtgtatg 480

ctatgtaacg taccatcagg tgtgagtgtg aggttccaca tggtgta 527

<210> 4050
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086h05b2

<400> 4050

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gcatttccct gcatttcttt cacgtttttt tttctttctc aatggttcct ttcgttaaaa 120

tggaccaaca tggactgaaa taataaaatt tatttccaag tttcaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaccaca gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaggggt gccaaaaata aaaaatcccc atttctttca 300

actcaacaaa tattgggggg ccccctttt 329

<210> 4051
<211> 535
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 4051

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gcctactccg cggtgtgggg ctggtggtgt gcgcactcct gcttctctcg ccctctttca 180

tggcggctga ggcaactggc cggaaatggg atcacgggag agaggccacg gtggccgtga 240

tgccgatggc gggagggcgt tttgcgagga aggtgttgcg ggaggagatg gtccaggcag 300

acggcgacgt cgacattgcc ggctctaaga ggaaaagccc cggtggccca gaccctcagc 360

atcattaact gatgtcgagg tctcctcgca tgcatatttc tctacaaagg cagcatatac 420

atgggacctg aattccaaga tagattgacc gatcaagctn gtgttcttgt cttgatatcg 480

tagtgaaaga gatggttttg tttcataagc ataggtatat acatgtatta catac 535

<210> 4052
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316086h09b2

<400> 4052

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agctctggaa tttcagcctc tctgatctta cagctgattt gacaagttta ggagatttgg 120

aggctcttga gaactacgaa ggtacccctt tcctgccctc ggactcggac ctcttacttg 180

attccccaga ccataatgat gacatagttg agtacttcgc cgacgccatc aacgggactc 240

aatcagatga agagaagtca tagagaagat gaaagactca ggtagtctca ttcagagtgg 300

gacctggcca gagtgtcatc tcatgtagtg taatcttgta gctgcgcgca aatcagactg 360

ggaattcacc cagaggtgcg gtgattggcg cgcgcccctg aagattttgt agcgttcgat 420

gctaattatt tggaataa 438

<210> 4053
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a06b1

<400> 4053

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tgcatcaaga tcctcgctca atgcaagaag gccatacctt cccgagaaat gggaggaaaa 120

gtgatcatca tagacatagt gcttggatct tctctagaga caataactga aaccgaactg 180

ctgatggaca tgctgatgtt catatgtacc agaggacggc aacgggatga aaaggagtgg 240

agcacgatct ttacgaaagc agggtttagc aactataaga ttgtcaagaa actttgccat 300

cgaggtgtca tcgaggtcta tccat 325

<210> 4054
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a10b1

<400> 4054

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atgcgttctc ctgtgaagag tgcataaatt gtttttattc gcttgatatt tatttatgcc 180

agctaatttg caggtcttac aattaatact aatctttagg cacaggacca ggaccacatg 240

gattgcatca tctggtttat gaaatactga ataatgttgt tggtgaagct caagcaggct 300

atgctactga gattaatgca gcccttcatg atgacaattc agttagtgta actgacaacg 360

gccgtggtgt atgcagtttc taaaacctat gaaagacttc ctgaatgttc aatgcttcta 420

caaatattgt ggaaaaagaa ttggtatgtg tt 452

<210> 4055
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a11b1

<400> 4055

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ctcggttcct tctccttact ccgagctgca gccatgggca aggagaagac tcacatcaac 120

atcgtggtca ttggccatgt cgactctggc aagtcgacca ccactggcca tctgatctac 180

aagcttggag gtattgac 198

<210> 4056
<211> 185
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087a12b1

<400> 4056

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tgcttcatga tcctcgctca atgcatgaag gccatacctt cccgagaaat gggaggaaaa 120

gtgctcatta tagacatagt gcttggatct tttttgagac aataacttaa accgaactgc 180

tgatg 185

<210> 4057
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b01b1

<400> 4057

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gacgagcttc tgtcggattc gttcccttac agggagctgg agaacggcgt gctctgggaa 180

gtcgatggcc attgggtcgt tcaaggagca gttgatgtgg acattggagc caatccctct 240

gctgagggtg gtggtgatga tgagggtgtt ga 272

<210> 4058
<211> 191
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b04b1

<400> 4058

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tatatattgc ggcgccttta ggcccccttt tttggttttt tccatttttt aaagcacagg 120

ggggtttttt tccaaaaaat aaaaaaaagg gggggcgctt cttgtgtcct tttattcccc 180

ccccccccc c 191

<210> 4059
<211> 533
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087b09b1

<400> 4059

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caagggaggc aaggggctgg gcaagggcgg cgccaagcgc caccggaagg tgctgcgcga 120

caacatccag ggcatcacca agccggcgat ccgccgtctt gcgcggcgtg gcggcgtgaa 180

gcgcatctcg gggctcatct acgaggagac ccgcggcgtg ctcaagatct tcctcgagaa 240

cgtcatccgc gacgccgtca cctacaccga gcacgcccgc cgcaagaccg tcaccgccat 300

ggacgtcgtc tacgcgctca agcgccaggg ccgcaccctc tacggattcg gcggctaggc 360

cgagggccca gccagctcgc gacgccgccg tccggcagag tagtggtatc tatctagttg 420

ctgtctaggg ttcgtggttc tcctttgatg tcgctggtgt ttgtctgctc ccgtcttgtg 480

agctgatgtt gtactggaag aaatttgaat ggaaatngca gtagctaccc ccg 533

<210> 4060
<211> 311
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b10b1

<400> 4060

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gagtttctag agctgcaaat tgcaagtgag ctttccaatc caccttttag ttgatcctct 180

tcccgtgagc agttgcaggt ctatgcatgg cgagactgct tatatatgag cacgccgcgg 240

tcgtgtactg ctaggacggt gaccgttcag gactagagcg acccgtggcc ggggaattac 300

ataccatagg c 311

<210> 4061
<211> 150
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b11b1

<400> 4061

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ctagcagatg gcaggcggca gagttgcaca tgcgaccctc aaggggccga gcgtggtgaa 120

ggagatcttc attggactca cccttggcct 150

<210> 4062
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087b12b1

<400> 4062

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tacctgctcc ggtgaattct tttggtggaa ttgaagtgta atttgattgg atccatgtag 120

gcgttgatga tctcatctgt tgattgtaac tgtgattaaa gaagaaacta g 171

<210> 4063
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087c08b1

<400> 4063

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agaggccgag tagctagcct agtctagggt ttcggtagag aggaagggag atccatggcg 120

gagacggagt accgctgctt cgtgggcgga ctcgcctggg ccaccgacga caacaacctt 180

cagcaggcct tcagccagta cggcgagatc ctcgacgcca agatcatcaa cgaccgcgag 240

acggggaggt cccgtgggtt cggcttcgtc acgttcggca gcgaggagtc gatgcgccag 300

gccatcgagg agatgaacgg caaggagctc gacgggcgca acatcaccgt caacgaggcc 360

cagtcccgtc gctcccgcgg ttggggcggc ggcagctgct acggc 405

<210> 4064
<211> 153
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087c09b1

<400> 4064

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cgagcaggac cgcctgtcca tcgtgacgtt ctacgcgcca gcctacgatg tcgagctcgg 120

cccgctgccg gagctagtcg ccgacgggga gcc 153

<210> 4065
<211> 65
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087c10b1

<400> 4065

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atcgc 65

<210> 4066
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087c11b1

<400> 4066

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ggcggcggcg gcgatatgca gttcctccga ggcgtcggcg gcgggggtgg cggaggagcg 120

ggaggggcgg ggtcaatggc gtgggaggtg ttgaggaggc atttctcgcg gaagcgggcg 180

gtggacatac ggcggatcaa ccccaaggtg cccaaggacg gaggacgaag tcattttcgg 240

tcggctactt catgatactg gagaccgctg accggtggac cgagccagca cctggaacca 300

ctcctaggac gctgcgatcg acagaccgat caggatgacc aacatgaaga tcctgctgaa 360

gatgctgtt 369

<210> 4067
<211> 215
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087c12b1

<400> 4067

ttcttttacc aaagctcatc ttcttctcct tgaaatcttt ttgggttcac agatttggag 60

gatgtcttgc aactgtggat ccggttgcag ctgcggctca gactgcaagt gcgggaagat 120

gtaccctgat ctgacggagc agggcagcgc cgccgcccag gtcgccgccg tggtcgtcct 180

cggcgtggcg cctgagaaca aggcggggca gttcg 215

<210> 4068
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d01b1

<400> 4068

ccttcgtgtc cgcagatctt ggcggactcg aatccaatcc aatccaatcc aaggcggagg 60

tcgagatcaa agccaccgga gatgaagttc ttctcggcgt tcgacccgtg gccggtgttc 120

ttccgccggg agtggggccg cacctggccc ttcctcgccg gcttcgccgt cacggggacc 180

ctcatcacca agatgaccgc cggcttcacc gaggaggacc tcaagaactc caagttcgtc 240

caggcgcaca agaacaagta gtcgccgtcc gcccggcccg ttcgccgcca ggtcacaggg 300

gcagcagctg agttaccggc atgtgtcctt gatgcggcga gccaattccc accctcacta 360

ttgtgattga actttctgtt ttt 383

<210> 4069
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d03b1

<400> 4069

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ggcaagacgt gcccgtctga gttcacttgc ccatcccatt gacggatgcg tactgctgca 120

cgggcgccga ataagatttg ctttcagatt ctaaaaaaat aaaaattatt tgctttcaag 180

ccgtacgtcg ttgttatttt cgtgtccaca tttgaatcct tgtaaccagc actacttttt 240

tcgtttttag caaacaacct aatagtcgtt ttttttgtga caaacatgta ctcttcgtat 300

taatatatat catcaataaa tttttgtca 329

<210> 4070
<211> 482
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087d04b1

<400> 4070

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aacaccctct tgatcatgcc ttttaagctt ccgccccttt gttcttatta tgttcgagtt 180

ctgttgaagg ctctgtttat ttgctcgtag ctaccttctt ttccttaagg atatttacat 240

ttttcttttt ttgttttatg agctcatggt tttctttctc catttctctt tccttctcta 300

ccatttttct acctttttt catctttccc cttgcaccta ctttttttctt tattctcttt 360

tcatttcttt ttcttttgtc ttttaggtct tttttctttt cttttctttt ttttcacttt 420

atcttcttct ctattattct tttttttctt tcttaattaa tttctcgccc ttctttttctt 480

tt 482

<210> 4071

<211> 363
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d05b1

<400> 4071

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tatatatggt ataaagtcaa gtgaatagtt gataacgagt gtctgtagag taggactaat 120

atttatctgg ctgatagctg tgaggcgtct ggtgttctcg tgtgaccata gtaggagatg 180

gtataaagat cggtctcctt cggtccttcc cggaagaaat ggatctggca ttctggctgg 240

aaaacttgct agtgagttcc tgtcttgtct tcgggtggat gcactgaaca gtccccccc 300

ccccccctt gaccgtttta aaaatgagga gcaaccaaca taggggaata ccgcatatat 360

ttt 363

<210> 4072
<211> 473
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087d06b1

<400> 4072

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gtttgaccaa gccggacgca agtcccgccg acgtgctaac cgtgtgacca aggcattgcg 120

cattgcaccc cgccccattg atggcctcat tcgccccgct gtcaggtgcc ccaccatcaa 180

gtacaacacc aagctccgtg ctggccgtgg tttcaccctc gaggaactga aggctgctgg 240

tgtccgtcgc aaggaggcca tctccattgg tgtatctgtc gacttcagac gtcgcaaccg 300

ttctgaagag tctctccaat tgaacgttaa ccgtctcaag gcctacaaag ctaaactcat 360

tgtgttcccc cgcaaggctg gaaaggtcaa gaagggtgac actgagatct ctttcgncga 420

ctttgccaag caagcgcata tcaaggtcgc caacgtcttc ccggttgagc aac 473

<210> 4073
<211> 199
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d08b1

<400> 4073

ctgacgcgtg gggttctggg ataaggttaa gagcgctgag aaggacgagg ttacgttgcc 60

tgatcagccg gaggatgagg agtcggtgat ggatgaactc tgatgtatca ataggagtga 120

agggttgatg tattcttagg cgtttgggat atggcattgg caaggcatcg aagctgcaat 180

aattttatag tatttaccg 199

<210> 4074
<211> 226
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087d09b1

<400> 4074

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gttacgcctg tttgataggg tctcctataa tctatatgca ctgcccgaag ttatacaacg 120

gtccgactgg gaacaccctg gggattccga acaataatga cttgcccaac tttcccctct 180

tgctagatgg cgcactttcg accggtgccg tactagtcga tatgtc 226

<210> 4075
<211> 310
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d10b1

<400> 4075

tctccttgga gcagcgggcg aggacatctc ctggccgggc tcctctttcc gcgggcgagg 60

tcatcccctg tatctcactg caccatgacg aacaggggga ggcgcttagc gcaccggcgg 120

ccagtttcta tagctgcaga ttgccagtga gctttccaat ccagctttta gttgatcctc 180

tctccgtgag cagtctgcaa gtctatgcat ggcgagactg cttatatatg agcacgcctg 240

ggacgtgtgc tgctaggacg gtgaccgctc atgactagag cgacccgtgg ccggcgattc 300

acataccata 310

<210> 4076
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087d11b1

<400> 4076

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gttcaccaga aaggtggtga aaccagcaca aacagcattg cttcaatctt tgcttggaca 120

agaggacttg cacacagggc aaagctagac gagaatgcta gacttcttga atttgcacag 180

aaacttgagg aagcgtgcgt cggaactgtg gagtctggga agatgaccaa ggaccttgca 240

ctccttgttc atggatcctc aaaagttaca agaggcgatt acctgaacac tgaagagttc 300

attgacgcag ttgctgctga gctcaaatca agactgtgaa agacctctcc ctcttcaatg 360

cttgaatagt cattactcat cgattcaagt cattttggtt atgtcggcat tattctgtca 420

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caatcgatt 489

<210> 4077
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087e02b1

<400> 4077

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cctccccgcc gccaccgccg cgcgcgcgcg agagagagac cacagcgacc aacccagcca 120

tgtcggtgcg tccgagcgag cgggccgacg cgcggcggaa ccgctacaag gtgacggtgg 180

acgccgatga ggggcggcgg cggcgcgagg acaacatggt ggagatccgc aagaaccgcc 240

gcgaggagag cctnctcaag aagcgccgcg aggggctcca ggcccaggct cctatccctg 300

ccgccggcgt cgagaagaag cttgaaagct tacctgctat ggttggtggg gtttattccg 360

aggataacaa cctgcagctt gaggcaacga cacaattccg caagttgctt tctatagaaa 420

ggagcccccc aatcg 435

<210> 4078
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087e03b1

<400> 4078

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ga 62

<210> 4079
<211> 92
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087e04b1

<400> 4079

ccttcgcgtc cggcaacagc tgataataat acaatgattg aagatttgtt ctacgctggg 60

aatctacttg acacaaggaa catattttta cc 92

<210> 4080
<211> 455
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087e05b1

<400> 4080

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tactgaactc gctggtttcg tgtgatctag agctcgggag ttactctagt tagagcatct 120

ccaacagccg cgctaaacta gcgccgcgcc gcaaattaga ccgtcttagc gcgcgcgcaa 180

cgcggcgggt cgcttcagcg ggcgcgcaaa accgacgcgc gcgttataac gggttgagcg 240

cgcggttgaa aatacttacc cgcgcggtgt attttgggcg ccagctacag cgcgcggcac 300

actcgatcgc tcgcgccgca ctctcttctc tcctcgtnct acgccccgcg cgcgccggcg 360

ccggcgccct gccacccacc catggacgcg cacaccggca ccccgctcac cccgctgtac 420

cgncgncgnc gnncgcggaa accctagcgc gggaa 455

<210> 4081
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087e09b1

<400> 4081

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aacgatgagg aggatgcttc caagcatgtg gaggactaat gggacttgga tgacgaggat 180

gctgtggatg aggacacagg tcacaagact aactgtgagg ccgactctga tgactagaag 240

aacaactaga cctagatgga tggctaggat gaacggaaga cgaactgctt ctccccggtg 300

ccatgattga agaggagc 318

<210> 4082
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087e11b1

<400> 4082

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gcaacctcga agatgtcttg ctgcggagga agctgcggct gcggcagcgc ctgcaagtgc 120

ggcaacggct gcggcggctg caacatgtac ccggaggtcg aggccgccgg cgccaccctc 180

ctcgtctccg ccactgccac ccacaaggcg agctccggcg ggatggagat ggcggcggag 240

aacggcggct gcggctgcac ccagtgcaag tgcggcacca gctgcggctg ctcctgctgc 300

agctgctaga tcattgatca tgcatgcgcc gcgtgcatca tatctatgat ctatctacca 360

tctactacca tgtaacgctg cctgatcgag ggtctttgta tgtatgtacg cacctgcctg 420

catgagcaga gcgggtgcca tgccatgcat gtaaacccct aaataaaatc ttccgtggtt 480

tgctt 485

<210> 4083

<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f08b1

<400> 4083

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tctaattgcc tatccaagaa aagaacgagt tcgaacaact ggagaaaaaa tggaccttag 120

aagacaatag aatggtgggg cggactacag gaccaaagat tacctggctg gcctgctacg 180

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<210> 4084
<211> 418
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087f09b1

<400> 4084

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ggtgcattat tgttctcgaa gatgagcaaa gtacgttctg aaaccgtgtc aactgagaag 120

tggaaggttg ccagtttagc tgctgtctca cttatctgtt tctcgtcttc tgctatacta 180

gcacttgtta ctaatattcc agtgcttttg tattggtact ccactgaggc ggagatcata 240

aaaaatgctg ntatattatt tttatattat ttaataggct catcggtacc atcaggattt 300

gttttatggg tcatgagaga tatgcctcaa cgaccaacgg tggaaaggcc cacccaatcg 360

agagtggtta ccttgttcag ggacagacca ttccctacac aggatccaca gtggagag 418

<210> 4085
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f10b1

<400> 4085

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agaagatcgc ctgcgccgtc cttgtcgccg cctccgccac cgtggccctc gccgccgaag 180

ccccggccat ggccccggcc cccggcgccg ccgtcgccgg ctccgccgcc gcagccgtcc 240

cggccgtcgg cgccgtgctc ggggccaccg tgctctcctt cttcgcctac tacctgcagt 300

aagcgcgccc cggcccgagt cagttcgctg cgaggaggag gaaggcagga agaagaagat 360

cactaattcg ctatgtatgg ctttacgcta cgctgattcg aggcacgcgc gtgcgctttg 420

atcgatgcat gcgcgtgct 439

<210> 4086
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087f12b1

<400> 4086

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gcgtgtgctg cgctcgccgc gacgccggcg gcgacgtatg cggagtaccg gccggagccc 180

gagccctgca agacgcaggc catgtacttc aagaactgcc tccgcctcgg ccactgcgag 240

aagtgctgct tcggggtggt ggccaacccg gcgtgctact tgcaggtgga gcgggaggcg 300

ctgatcgagt gcgcgcctgg ccaccactgc agtcgc 336

<210> 4087
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087g06b1

<400> 4087

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gcaagctgag gtgtgtggag ctcaagtaca agaggatgca ccgctgcata acctacaggc 180

tggagaacca gacggaggtc attgtggacc aaactgggga gcgcgaggcc acctatgatg 240

acttcaccaa gaccctccct gagaatgact gacgatacgc ggagttcgac tacgacttca 300

ccacccagga ggatgtgcca aagagcacga tcttctatat cttctggaac ccggacaccg 360

cacaggtgag gagcaagatg acgtacgcta gcaccaacga gaagttcaag aggaccctgg 420

acggcatcca catcgagat 439

<210> 4088
<211> 195
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087g08b1

<400> 4088

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ctaattgcct atcccagaag agaaaatgaa caaacaacag gcgtaaacat ggacctaagg 120

agccaatgat acggtggggc ggagtacagg accaaagatg agctggctgc ccggctacga 180

tcgatgtgtg aacaa 195

<210> 4089
<211> 372
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087h01b1

<400> 4089

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agacccggcg ctacctcgag atgctgtacg ccctcaagta ccgcaccatg gccagcaccg 120

ttccactagc tgttgaggga gactccgcga gcaagtaatc tggccacctc ctggccgaaa 180

gaagggtgac ttggatttct gaaagattga gatttgagaa tgatttggtt tacgtcctag 240

gcgctgcccc tttcaagatt taaggttgag taattggtgt gctagttttg tttagtagtt 300

ggagtgagtc gagacagagg aaaatgtggt gtgtgacaat cggttggttg gtgcttatcn 360

gttttcttgg at 372

<210> 4090
<211> 102
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316087h03b1

<400> 4090

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaactaaata at 102

<210> 4091
<211> 549
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316087h11b1

<400> 4091

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gatttggagg atgtcttgca actgtggatc cggttgcagc tgcggctcag actgcaagtg 120

cgggaaggtg taccctgatc tgacggagca gggcagtgcc gccgcccagg tcgccgccgt 180

ggtcgtcctc ggcgtggcgc ctgagaacaa ggcaggtcag ttcgaggtgg ccgccggcca 240

gtccggcgag ggctgcagct gcggcgacaa ctgcaagtgc aacccctgca actgttaagc 300

tgcatgcact cgtaccgtcg tacgtacgtg tgatggtgtg agagtatacg tgaataacga 360

gcgtctgatc tgatggagtc gagcaagggt gcgtgtgcat gtgcgtgtgg tttacttcgc 420

tcgctctccg cctatgctct gaccttggtg tacttgcttg tatgtgtgtg catgtgtccc 480

tgtaattgct tcatctatct ncaatatgga tggagtgatg aatttgtaga atgaatgatt 540

acctaatta 549

<210> 4092
<211> 230
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088a01b1

<400> 4092

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cttagatttg ggtttagtat tgagatttct caatgttgaa atatgaatgt gcttttgctg 180

gaacaacatg gtctttctga aaaaaaacca gctcagaact gcaaatactc 230

<210> 4093
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088a05b1

<400> 4093

cccgggggggg ggtttatgga gatgagggtg ttgtttctcc cccgcaaaat ggtctgctgg 60

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atttttgtaa ctgctaggct gtggttctat gtgctgagga gggaggcgct gctgctcatg 180

ttgctgctgc tggagtcctc actttatttg ttcagactat gtaatgaccg aatgatgtta 240

tttgtctgtg tcat 254

<210> 4094
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088a08b1

<400> 4094

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tggtcctcct cccggcgggc cgtgctctcg ccacggcggc cggcgacgcg cacccgggct 180

acgcgggcgc ggaggccgac acctgcgagc cggcgcccgg cggcgctccc ccctacggag 240

gaggcgcggc aggccggcgc cacggcccgg cgctggagga gtacgggggc gggcacatcg 300

tggacattac gcacgcgtac cgccccagca tgccggcgtt cgcgcccggc gcgaccgtcg 360

gccccctcgt gcggctcaag gcggccattg aggacgggtc ggagtacac 409

<210> 4095
<211> 189
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088a11b1

<400> 4095

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tgtgtcaata aaatcctgtc cggaacaaat gttgatagcc tgttgggggc cagtactcag 120

aggaccaccc tcttaatacc ggcggacggt gatcccaatt tctatatatg gcttaaataa 180

ctaaaaatc 189

<210> 4096
<211> 229
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088b01b1

<400> 4096

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tgctgtttat ctatgtttgc tagctctaga ttacccgtca gtgacatgta ttgcagtaag 120

gatgtcgttt ttgatcagta ctttggtaac ctggtgatat ttgttatcag ttttcgctgt 180

cgtggtctgg attcttcagt ccacataaag aagattatta tgcttggat 229

<210> 4097
<211> 297
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088b02b1

<400> 4097

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gtgtggcggc gggcatgaac gagtcctagg gcaggggggat ggaaaaacaa attacccttc 180

ccgctggtgt acacggggta ccctacggcc gcagacccga ataaggggtc ccttggcacc 240

atcgcgccca tcgggatcgg gttaatcgtg ggcgccaaca tacttgccgc cggcccc 297

<210> 4098
<211> 255

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088b11b1

<400> 4098

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tcagtcgact ctccaatgtt gtgtcggtaa ctatcagatg ttgagtgtct tgaaaacttt 120

ctgataattg tgggatttgc tttgtaatgg taatcgtgaa attggtgtgg ttaaaaaaaa 180

aaaaaaaaaa ataattatca aagtaaaaaa aataaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aacaa 255

<210> 4099
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088c02b1

<400> 4099

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tgaactggag gacgggtggc atggtgcagc gggagatcgg cagcgccaga tctggccgcc 180

cctgcctccc ctgtgtggcg agctcctacc cggccggatc cggtctgctc ctctgcgggc 240

cgacaggtct cgcgccgttg gggtaagggt ggcggggatt ccaagaccgg gagaaatcct 300

aggccggtct cgccgggctt g 321

<210> 4100
<211> 247
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088c11b1

<400> 4100

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tggccatact ctgggactat atctggtact aggactgctc ccgcgcacac gcagaggtac 120

tggtcgaggt tcggcacggc acagggaacc gtacatcgat tcttattccc accagttgac 180

aatccacaag acgatgtgcc acctggactg acacctaata tgacactttg gataccagct 240

attgcac 247

<210> 4101
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088d07b1

<400> 4101

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atccactccg tgctcctccc caagaaggtc ggcaagggcg ccggcaccgg cgggtccgcc 120

tcccagtccc aggagttcta gagcgtcaga gatctgatga gtggtgtcgc gtggtggtgt 180

ggtgctttta ggttggcaga ttagctcgtc ttggccaatg ttcttgttgg tgcgtgtatc 240

gagggtggat ctggttggaa tggaatgctt gcaatcttgt tcttgtctgc tgcctgtgat 300

ttgttcatgg gagtaatctt gatgaaacgg atttttgttt ggttctgac 349

<210> 4102
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088d10b1

<400> 4102

gtggcgcaat cgtcaacatc ggctccggtg ctgcctctgt tgtgccgtcc gatccactct 60

actccgtcta cgccgccacg aaagcgtacg ttgaccagtt ctcaagatgc ctctatgttg 120

agtacaaggg caagggcatt gatgtgcaat gccaggtgcc cttgtacgtg gcgacaaaga 180

tggcatcaat caggaggtct tccttccttg tgccatccgc ggacacctat gctcgtgctg 240

ctattcgcca cattggctat gagccgaggt gcacaccgta ctggccacac tctgttctgt 300

gggtcttgat ctcccttctc ccagagtcac ttgtggatag tacacgcctc agcatgtgca 360

tcaagatccg caagaagggg caggctaagg atgccaagaa gaaagcgcag tgatgattcc 420

gctgctagt 429

<210> 4103
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088d12b1

<400> 4103

cgctttaatg gaaaaggatc caaacaaggc agttctattg ttctgggcag ctattaatag 60

cggtgaacga attgaggctg cattgaagga tatggctact gtactgaaac aagcaaatcg 120

ggctgaagaa gccgtcgaag cgataagatc tttccgtgac cgttgtccaa atgaagctca 180

ggagtctctt gacaatattc ttcttgacct atacaaggaa acacatggac atgaagctgc 240

ggtggcgatg aagacgatat taacatgagg ttgcggcggc gatgacatcg acatcgacac 300

gaagctgcgg cggcggtgac gacatcgaca tcgacacgaa gctgcggcgg cggtgatgac 360

gacgacatca tcacggtgct gtggcggcga cgatgacgac atcgtcacag tgctgtcgtg 420

gcggcggcga 430

<210> 4104
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088e08b1

<400> 4104

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aggaagaggc gcgccctcat acggaacggg tacagcccgt acgtgcctga tgaagaccag 180

aagggtttga tcaa 194

<210> 4105
<211> 258
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088e09b1

<400> 4105

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cctgcaaggt gaacacggtt tatgaggaca aaaacatggg catcctcctg tacactgatg 120

acaatggtga cttggagggc gagggcttgg atgaaggccc aagactaaca ctgcgagata 180

tggagatatt ggccaaagat agagactcga agaacacgac agacgattgg cgggagagag 240

cgctgtggat cgtgggcg 258

<210> 4106
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088e11b1

<400> 4106

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catgatcatg acatgctggc gctttttggg gggccatcaa gagatcgatg atccatctcc 120

taggtcataa ttaggctatc cgctgaattg gtttgcccca cctgtgaccc tgtagtggca 180

ctgtatcttt ctttttgaac tgaccacctg tagtattttc taatttggcc agaagttcat 240

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ctgccaccga tcattaactc gccgaatga 329

<210> 4107
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f01b1

<400> 4107

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ttcactagga gcgaaaagga gctaccatgg gtatttcatc caagtggatc aaatcacttg 120

ttgggataaa aaagcattgg aaaagctcaa aatggcgaaa gcagcagaga aaggagctct 180

gctgctcagc tgctacacaa acggaaacat tctgtggata ctgaaggctc ccttgcagtt 240

gcagaacaca cagtgcaaat tgaaccattg gctagtgaca ccaatacaca gacaatttca 300

tctgagactg agctaaatac aaaggagcat caggctgcaa cagttattca atcagccttt 360

cgagctttct tggctag 377

<210> 4108
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f03b1

<400> 4108

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agctccaagc ctaccaacca agtctacgac caccgggagt gaaaaacaaa aggcgataag 180

ttaaattaaa atcctcgcga aaaggaacaa aacatacgaa gcccaccaag gaatagcacg 240

atttgcaagg tgatggggtc ttcttaacat gggcctagtc ccacaagagg ttgatcatcg 300

agttggccag cccggcctcc ttgaaggtct gctcgctcga g 341

<210> 4109
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f05b1

<400> 4109

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cctgtccctg ccgcctctag ctgccggtcc agccgtgtgc gtcctccggt ccgccgggga 120

cttcgccggc ggcgccttcg tcggatctat ctttggatat ggacaaggtt tgctatctaa 180

gaagggtttg aagggctcac tcggcaatgc agggtcttct gccaaaagtt ttgcagttct 240

ttctggcgtc cagagtttgg ttttgtgctt gttgaggaag ctgcgtggga aagatgatat 300

catcaattcc ggcattgctg gttgttgcac aggtcttgct ttgagttttc cagggacacc 360

acaagcgctg ctttagaact gcgccacctt cgcagcattc tcatgcatca tggaagggct 420

caacaagcag cagaccgcga tggcgcacac cctcactggg aaacgcctga cctttgcaca 480

<210> 4110
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f06b1

<400> 4110

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gctgcagacg agaagcggct gaggcgaaga ggaatcgacc atggcgaccc gtatccagtt 120

tgagaacaac tgtgaagttg gtgttttctc caagctcaca aatgcctact gtctggttgc 180

aattggagga tcagagaatt tctacagtac atttgagtct gagcttgcag atgtcattcc 240

tgtggtcaag acctctatcg gtggcactag aataattggt cgcctctgcg ttggaaacaa 300

gaatggactt ctcttgccac acacaaccac tgatcaagag cttcagcatc tgaggaactg 360

catacctgat caagtggttg ttcagcgcat cgatgagagg ctgtctgccc ttggaattgc 420

atatactgca atgaccatgt tgcgctcaca caccttgac ctgac 465

<210> 4111
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f07b1

<400> 4111

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tacaaacaaa cgctgttagg gtagccaaga agctatttag tcggtggcca gaggtcagag 180

gtcagttgag ttgttgatta gtcgtcattg cgcaattctg ctacaggttg gcgaaaaatg 240

tgtgaactct acagactcta gtccatgtgt catgtgcgag ttgctgcaaa cagaacaaga 300

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ctctttgctg agctctg 377

<210> 4112
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f09b1

<400> 4112

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cggcgagaga ggcaacggag ccactatgcc tggagcagat gagacgtttc cggcagagtc 120

gagggcgacg gtgttctttg gggctgtgac atctaaatcg gagccgctga cctttgaaga 180

gtccctcaga tttgtcaaga aagtgaaggc tcgcaactac atgctgtacc tgtcgctgtt 240

tgacatcctg ggcaggacag agctgtccca gctggaggcc taccaaacac tgcagctgct 300

gttccgcgac cacccggacc tgcacgaagg gctggag 337

<210> 4113
<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f10b1

<400> 4113

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tatgtgagtc cttgtgtggg ctttgtgttg taaccgctga agttttaatg aagatctagg 180

cccttcatgg cctttcctgg tcaaaaaaaa agagagagag ctggactcac agctggaaag 240

gtttcatacg agaattgttt ggaaacaaaa aggaccgag 279

<210> 4114
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088f12b1

<400> 4114

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cagcaccaag gctgaatacc gaagagttca aactttggag ctggcggact gcatattgaa 120

atcctgggtc ggcgacgatg tctcgagcgc atcaaaggtt ttgaagaagc atatggctct 180

gctgtgcgag ctgatgcagg aaatcctcac aaagatgccc gaaaacaagt cgcgtcgcca 240

ggaggtgcgt agattctgca cgcgggctct gcaaaccgtg acgaggctca atctgaaaga 300

gaagtttcag aagaagctaa gcccggaagc ctacaccctg tgtgatgcac agctgggagc 360

tgcatttgtt cccttccgac agtgatgcgt gtgaatccat ttctgaagac ggtgaattgc 420

accagaaatg actttgggct gaattaactc tgcttgtaat atcagctcct taggttcgat 480

t 481

<210> 4115
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088g01b1

<400> 4115

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gcagcagcag cagcagcagc ctagtcgtca tcgtcgccga tggcagggtt cggcagcctg 120

gcgtccaaga ctaataatgt ggtggtggcg ggcgggctga cggagttcgt ctctggggtg 180

tactactaca ccatgtgggc ggtgggcagc accgacgagc tgcaggtcac tatcgacaag 240

tttgaggacc tgaagaagaa gg 262

<210> 4116
<211> 416
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316088g02b1

<400> 4116

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ggaacaaagt gcctctccag caaagcaggc agagcccgag ccgcgcctcg aggaggaaca 120

gagcgttttt tctccaatct ctcgcgtccc gcactggttc agccgccgca cggatgcctc 180

cgagctcatg gggttcgcgg cgcgcggcct gctcgggaat ggcaggtcca tgcaggaggg 240

gtaccggcag ttccaggagc cgtcggtgtt caacgcctgg tgggaggctc acacgagcag 300

cgcgatgatg cccaggtgga gcaccgcttg acctgggccg gcctaaaggg gtgcatgcct 360

tccctttga cagttatnca caaggacgcc gacacgattt aaatagaatg cctctg 416

<210> 4117

<211> 283
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088g08b1

<400> 4117

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cggaataacg gcggtgctga tctctcttct cttcactccc gtggagaaga ggtttttgtt 120

tttggatgaa gaagaaaatg tacccctaat cagcatgcgc gcggttgttg tagaaggaga 180

agatgtaagt tgatgcagat gtaatcaatg gaagttggtt aaatttcgta gtaaatgaaa 240

gaagacctag aagacacaag gactaaattt ggaaactgat cgt 283

<210> 4118
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088g11b1

<400> 4118

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cggttcctcg cgctgcccct ggcgctgctc ctcgcgatcg gctcgtcgcg cggcctcgac 120

gcggcgccca agcccccccgt ccccaaggcc atctccgacc tgagggaggc gatcgtgaag 180

gggctggggc tccagtcgga ggagctcaag gtgtccgggt tcgacgtgag ggacgcgctg 240

gtggggcacg cggtggcgta cgagttcgac atggaggtcg ggaggaaggc cgtgccggtg 300

cggctgctcg aggacgtcaa ccgctgggac ttcgtcgacc tgcccatctt ccggtcccag 360

gccgacgccg acgacacggc gctcgccgag attgggcgga ggagctttga ccccacgct 419

<210> 4119
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088g12b1

<400> 4119

aaaaaaaaat tccatttttc ccccaaaaaa aaaaaaaaaa aaaaaaacta actactcaaa 60

aatcaaaaaa ataaaaaaaa ataaaaaaaa aaaacaaaac gggggggggc ctttaaaggg 120

accaccgctc ccctcccggg catggcaaaa acaattcctt tataagggtc ccccaaaaaa 180

aaataaaagc cgcgtttttt aacacccctc ttatgggaaa aaacctgggt acacccaacc 240

caacgccctt gaaaaaaaac cccattttcc cgtgggggaa aaacaaagaa agggc 295

<210> 4120
<211> 151
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088h03b1

<400> 4120

catcatcctc tacatctaat gagattatag ttcaaatcat acattcagaa ttatccaatg 60

tggaacttat atgcattgag gttacattta aaaaaaaaaa tacaatcgat gggaaaaaaa 120

caaaacaaaa aattaaaatt taaaaggatg a 151

<210> 4121
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088h04b1

<400> 4121

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tccggatcaa gcagaagctg gccaagaagc agcgccagaa ccgccccatc ccctactgga 120

tccgcatgag gaccgacaac accatcaggt acaacgccaa gcgcaggcac tggcgccgca 180

ccaagctcgg attctaatcc ggggatgacg gcgatgacac ccgttgctgc cgacgggaga 240

agggtctagg gtacctaggg cttatgatgt ctcgctgctt ttgcatgcta gcaagtgact 300

ccgggatgcc agttttaaga ttccgcttgt gctgaaagat attattatta ttactgcttg 360

tagcctacct tgggataccg catattctgc tgattatgga acccctttta tcctgcttaa 420

aaaaca 426

<210> 4122
<211> 381
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088h07b1

<400> 4122

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tggccatgat gatcacgcgc atggtcatgg acatgcacac gagcatgagg cttcgacgtc 120

gtcatcgccg tcccattgag ctcgacgctg aaagcggctg acagagaccc tgacgcgttg 180

catgtttcga cgcaagtctc tgctaataaa aaacaatcac aactatcatt atttaccccct 240

gttgtttgca agaatttttt tttagcacac aaactggcct tgttgtgtat ttcggtttgg 300

agctgtggcg tccgtgggaa tgcttccgcg tgcatgtgtt gttgcttatt gtgatcgctg 360

cagctgttgt cgcacgctct g 381

<210> 4123
<211> 253
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316088h12b1

<400> 4123

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ctcctgtctt tcttgaagag ttttttttttt tcgcttagct tttttgatag gtttcactga 120

ggagaccact agagaatgta atacgctggt aacactagaa gaaatatgaa tgctattttt 180

tgctagtttt atgttactgg tgaatgaatg cagtatttta gtggcaaaaa aaactaacta 240

aagctgaaag att 253

<210> 4124
<211> 523
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089a01b1

<400> 4124

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actcaatggg atgcttttga atgacaaaaa ggtttatgtt gggccttttg ttcgtaaaca 120

ggaaagggaa aatgtttttg gcagtcccaa gttcaataat gtctatgtaa agaatctatc 180

agaatctacc actgaagata atctgagaga attgtttggt aattttggac ctataactag 240

tgttattgta gtgcgaggcg atgatggtaa atccagatgc tttggattcg tgaactttga 300

aaatccggat gatgctgcat gtgctgttga ggatttgaat ggcaagaaat ttgatgataa 360

ggaattgtat gttggtagag cccaaaagaa gtctgaaagg gagatgncat tgaaggaaaa 420

ttttgagaaa agcaataaag agacagctga caggaaccaa ggcactaact tgtatttgaa 480

aactttgatg gagtgttgat gacgatagaa gtaaaaagaa ctt 523

<210> 4125
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a03b1

<400> 4125

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gtttcacatt cactgccaat ggctgggtgc aatcttatgg atccaggtgc gtcaagccac 120

cgattatcta tggtgacgtg agccgcccca accccatgac tgtgttctgg tccaagatgg 180

cacagagcat gactgctcgc ccaatgaagg gaatgttgac aggccctgtc acaatcctta 240

actggtcttt tgtcagaaat gaccaaccga ggtttgagac ttgctaccag attgctcttg 300

caatcaagaa ggaagttgag gatcttgagg caggcggtat tcatgtcatc caaattgacg 360

aggctgcttt gagagagggt ctgccactcc gcaagtctga gcacgctttc tacttggact 420

<210> 4126
<211> 483
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089a04b1

<400> 4126

cttttcctag gtagcctnca tcaactctag aagcgggggg cttctttgaa gtggtttgat 60

cttatcatac cgggaagttc tcaatgaagc acaggttttt gatctctctg aagagtcccc 120

tgacaaggtg ctgcacaggt tgtatgccaa cttccaaagg ctcaagtcca acggtgacct 180

tcttgctatt caaatagaga agagcctgag actaattgtt gctggtggtg atggcacggc 240

aagttggctg cttggagtag ttagtgatct taagcttaca cactcacccc ctgtcgctac 300

tgtgcctctg ggaaccggaa acaaccttcc tttttcattt ggatggggaa agaagaaccc 360

agctactgac caagaggcag tgaaatcctt ccttgggcta gtgaaagaag cangagaaat 420

gagcattgat agttggcata tcatcatgag gatgcgagtt ccacaggaag gtccatgtga 480

tcc 483

<210> 4127
<211> 495
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a05b1

<400> 4127

cccctggcta gacagtgctg agaccatccg caagggactt gttcttggtg tcaacgtcaa 60

gattatcaca ggtgaccaac ttgctattgg aaaggagact ggtaggaggc ttgggatggg 120

cacaaacatg tatccttctt ctgcattgct tggccaaagc aaggacggtt cacttgagtc 180

acttcctgtt gatgagctga ttgagaaggc tgatggattt gccggagtct tccctgagca 240

caagtatgag attgtgaaga ggctgcaaga gaagaagcac attgttggta tgactggcga 300

tggtgtcaat gatgctcctg ctcttaagaa ggccgacatt ggtattgctg tcgatgatgc 360

tacagatgct gctcgaagtg cttcagacat tgtgcttacc gagccaggtc tcagtgtcat 420

tatcagtgct gtcctgacca gcaggtgcat ttttcagagg atgaagaact acacgatcta 480

tgcagtttcc atcac 495

<210> 4128
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a06b1

<400> 4128

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gtcatggctt cctactgctc tgagctccag taccttgcca acccggtgac caaccatgtc 120

cagagtgctg agcagcacaa ccaggacgtg aactctctgg gccttgtctc ggccaggaag 180

accgccgagg ccgtggacat cctcaagctc atgtcctcca catacatggt ggcgctgtgc 240

caggccatcg acctccgcca cctggaggag aacatcaaga cctccgtgaa gaactgcgtg 300

acgcaggtgt cgaagaaggt gctgaccatg aaccccaccg gcgacctctc cagcgcgcgc 360

ttcagcgaga agagcctcat caccgccatc gaccgcgagg ccgtgttcag ctacgccgac 420

gacgcctgca gcgccaacta cccactgatg cagaagctgc gcgccgtgct ggtcgaccac 480

gc 482

<210> 4129
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a07b1

<400> 4129

ccaatacccc cggaggcacg accgcacaca agggggggc tcaataaaaa aagcggggcg 60

aacaacaccg ccaccggcac gaacaagaaa ccaaccaccg ccaaccaagc ccccagaaac 120

aaccaaaggg gcgcccacag cacggaagac gaaaaaaccg agacgcacaa cccccaaaaa 180

aggagcgggg caaccaggag ccaccacacg gacacgaccc caacggacac caagaagaag 240

cccaagacca cgcggcgaaa accc 264

<210> 4130
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089a08b1

<400> 4130

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agcatggaag cacgggaaag attttacact tgattacctt ttaccttcca ctttggggtg 120

ccattctcta caatgggttt acgtactatc aagtaaaccg catgctgaac aatgcgacac 180

ggatggctgt tggcatgagt gatcgatcaa gtcaatctga cgtgagggcg gacaagaagg 240

catttaaccg gtggggttat taccctctga ttttaatcgg ttcatgggct ttcgcgacaa 300

tcaatcgcct gcatgacttt gctaatcctg gtcacaagat attttggctg tccatccttg 360

atattggatt tgctggactt atgggccttt ctaattcgat tgcttatggt ctcaactctt 420

cagtgcgcag agcatttgca gaaagattng acatgtatct acccgagaga atcaanaggg 480

agcctcctac 490

<210> 4131
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a09b1

<400> 4131

taaatgcacg gcagcaaatg tacagtcatt ggctggggtg aacacgcttg gcgtgtccat 60

ggcacgcatc gactacgcgc cgggaggcca gaacccgccg cacacccacc cgcgtgccac 120

cgagatcatc ttcgtcaccg aaggagtcct cgaggtgggc ttgatcacca ccgccaacaa 180

gctcttcact aagactgtca ccgtcggaga cgtgttcgtt tttccgcgtg gcctcgtgca 240

cttccagcag aacaggggcc gtggccctgc atccgtcatc gccggcttca acagccagct 300

ccagggcaca caagtcatca ccaccacgct cttcgctgcc gagccgccag tgcctagcga 360

cgtgctggcc aaggccttcc gggtcagtaa cgaggacatc gacgccgtca aggccaagtt 420

caagtagtgt gggtgcctcc gcagttggca actctcca 458

<210> 4132
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a10b1

<400> 4132

tgcgtaccag gagcaagaga cacacattgg ctggggtgaa tacacctggc gagggcatcc 60

cacgcaccga ctacgcccca ggagggcaga acgcggcaca cacccacccg cgagccgccg 120

agatcatgtt cgccaccgac ggagcactgg agggggactc taacagcacc gaccacaagc 180

tcttgactaa gactgtcacc gacggagacg tgagcggtgt tccgcgtggc ctcgtgcact 240

tccagcagaa caggggggcga ggacctgcat ccgacatcgc cggctacaac agccagctgc 300

agggcacaca agacatcacc accacgctct tcgctggcga gccggcagtg cctagcgac 359

<210> 4133
<211> 385
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089a11b1

<400> 4133

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gctgtgggag ttaacatcga agttggtgga atagaggttg attccatgtt tagaacaagt 180

atacctagca tctttgctat tggagatgtg gcagcttttc cgctcaagat gtatgataga 240

atagctcgag tggagcatgt ggatcatgcc agaaagtctg cacaacattg tatagaaaca 300

ctgttaacat cccaggcaga agcgtatgac taccttccgt atttctattc tcgagttttt 360

gagtatgaaa gaagcttcag gaaaa 385

<210> 4134
<211> 267
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089a12b1

<400> 4134

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aagcagaggg agtcaaggga ggaagccacg acaaaagagg aaccgacagc ccgccaccgc 180

acgccgcccg aacaacagaa ccgtgagggc agccggacgc ggacgaaaga agaaccgccg 240

cccacggagg cagaacccaa agaggag 267

<210> 4135
<211> 439
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b01b1

<400> 4135

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gacaaggagg ccttctccga caagaagctg cgggtcgagg tcgtcggcag cgacgacgcc 180

gccacccgca agcgccgccg cgaggacgac aaaagtgatg aaggagaatg tgtcgattct 240

tcttctatag tgatggctgc accaatttta cgagttacta ccatgaatat caattcggcg 300

attcttgctg taaaaagtcc tttctttttc aagcttttct caaacggcat gaaagagtct 360

gacagggaca ggcaacactt tcgatcgctg attcagagga aaatgccctc atggagcttt 420

tgtactttat gtatagtgg 439

<210> 4136
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b02b1

<400> 4136

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ttttagccgg agaggttctt gggcgaggag agcaacgtgg acgccacggt cggcggcaag 120

gtggacttcc ggttcctccc gttcggcgtg gggcggcgca gctgccccgg tatcatcctc 180

gcgctgccca tcctggcgct catcgtcggg aagctggtga ggagcttcga gatggtgccg 240

ccgccaggcg tggacaagct cgacgtgagc gagaaaggcg ggcagttcag cctgcacatt 300

gccaaccatt ccgtcgtcgc attccacccc atctcaccct gagcaattgc atcttcaacc 360

caatagcctg atccacaagc acaatttttc ttcagattac aaatacagta gattacacga 420

aagtatgtca gttgatttat ggggattaca ttttttttct ttattaaaag gacgat 476

<210> 4137
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b03b1

<400> 4137

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gatgcccaag gtgtggctat tgcaccagag aagatgcagg agcactttga ggacttctat 120

gaggatatct atgaggagct gagcaagttt ggtgaggttg agaccctgaa tgtgtgcgac 180

aaccttgctg accacatgat tgggaatgtc tatgtccagt tcagggagga agagcaggca 240

gtggctgctc acaatgccct ccaaggccgc ttctactctg gtcgcccgat cattgtggag 300

tactcccctg tgacagactt ccgggaggcg acctgcaggc agtttgagga gaacagctgc 360

aaccgtggcg gctactgcaa cttcatgcac gtgaagcaga ttggtaggga gctcaggagg 420

aagctatatg gtgggcgttc caggaggagc cacgggagga 460

<210> 4138
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b04b1

<400> 4138

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ggcgcctcgg tcgtcgacct gcaggacgtg ttcatgcgcc tgacgttcga cctcacggcg 180

atgttcatat tcggtacgga tcccggctgc ctggccgctg acttcccgcg agtgccattc 240

gccgcggcca tggacgaggc cgaggcggtg ctgttctaca ggcacgtgac gcccactgcc 300

tggcggaggc tccagaccta cctaaacatc ggccatcaca agaagatgac caaggctcag 360

caggtgctcg acgcgtctat cgccgagttc gtctcgctac ggcgagagcg cgcggccagt 420

gccgacgcca acgccgatgg aagcgacgac gccgctgatc ttctcacgtt gtacatggca 480

tgccaagacg agctaggc 498

<210> 4139
<211> 195
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b05b1

<400> 4139

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agaggacaag gtcacgagac acggagacca tcatgcacac gaaaggacgg aacactacaa 180

gccatggaag gatag 195

<210> 4140
<211> 500
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b06b1

<400> 4140

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gaggatatgt tccattggca ggcaaccatt atgggtcctc ctgatagtcc ctatgctgga 180

ggtgttttct tagtgaatat ccatttcccc ccggactacc ccttcaagcc tccgaaggta 240

tcgttcaaga caaaggtctt ccatccgaac atcaatagca atggaagcat atgcctcgac 300

attctgaagg agcaatggag tcctgctttg acaatctcta aggttctgct ttcaatctgc 360

tcactgctta ccgaccctaa cccggacgac cctctcgtcc ctgagattgc ccacatgtac 420

aagacggatc ggtccaagta cgagacgaca gcccgcagct ggacgcataa gtatgccatg 480

ggatgatccc gagcccatgc 500

<210> 4141
<211> 525
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089b07b1

<400> 4141

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agaaggcgcc atggggctct gggactcgct cctcaactgg ctccgaagcc tgttctttaa 120

gcaggagatg gagctctccc tggttggcct acagaatgct gggaagacat ctctagtcaa 180

ttcaattgct accggtggct acagcgagga catgattcca actgtaggct ttaatatgcg 240

gaaagtcacc aagggaaatg tcacaattaa actttgggat cttggagggc aacgtagatt 300

ccggactatg tgggagcgct actgtcgtgg agttactgct attttatacg ttgtcgatgc 360

tgctgaccgg gatagcgttc cgattgccaa aagtgaattg catgacctgc tgacanaaca 420

gtctttatct gggatcccct tacttatcct tggcaaacaa atngacaagt cagaggcact 480

ttctaagccn gcattagttg atcaactagg cctggaatct ataaa 525

<210> 4142
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b08b1

<400> 4142

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ttcgcgccgc aactccgcca tgaagttgaa catcgcgaac cccaccacgg ggtgccagaa 120

gaaggtcgag atcgatgacg accagaagct gcggaacctt tatgacaaga ggatctccca 180

ggaggtagtt ggtgatcttc tgggtgagga attcaagggt tatatcttca agatcatggg 240

tggatgtgat aagcagggct tcccgatgaa gcaaggagtg ctaacttctg ggcgtgtccg 300

ccttctgctt cacaggggca cgccttgctt ccgtggtttt ggcaggcgta atggtgagcg 360

caggaggaaa tccgtccgtg gttgcattgt cagccaagac ctatctgtta tcaacttggt 420

gattgtcaag aagggtgaga atgatctgcc aggccttact gacactgaga agcccaggat 480

gaggggaccc aag 493

<210> 4143
<211> 357
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089b09b1

<400> 4143

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tatttcagga aaggatgtgt ttcggaggcc atggagcagt atgaggaggc aatatctgct 120

tttcaaatag ctttgcagca caatccacaa aatacagaag tcgcgagaaa gatcaagagg 180

cttactcagt tagcaaggga acagaagcga gctgttgatg tggagaacct gcgttccaat 240

attgacatca ggaagaactt gcagtcattg aaaaaggagc tggctacaaa gtatggagat 300

gcagaaatgg gacaaaatat attctcattt gttatcagtg tgattgaaac agcgatt 357

<210> 4144
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089b10b1

<400> 4144

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cagaccgcgc actcctcctt agctcgagcc cagaccggag ccctgttccg ccgtggatcg 120

ctggaggaga gggccaccgg ccggatcccg acgggccaga tggtgggcga cccccgcggc 180

gggggcgagt agcacggctg cgatcggcgg cggacggatc ggcggcgccg caaggcggcg 240

ggggccacca tgtctgccgt agtgtgcggc aagaggtcct ccatcttcgc cgacgagctc 300

atcccttgct ctccgccttc ccctccccac caccaccctt ncaagcgggc ccgctgctcc 360

ccgacccgcg ccttcgacga cgccgccgcg gcccaccggc gggaggcgct gctccaccac 420

cttcgctccc tcttncctca catggatccc ca 452

<210> 4145
<211> 320
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089b11b1

<400> 4145

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tcaacccaaa cacgcaacga caaatcgagc accaagcggg ggcaggacac gccgaggagg 120

gcgaggcgag aggggcgacg accacaaacg aacgggcgag aaggagagca aacaagccgg 180

ccagggccag tggcaaggcg gggaccggca ggggactaat ctaggacgcc gcatggcagg 240

aggagagacc atgtcatgga taaggaggtg gaagatgatc gacaggtcat tccatgaact 300

aagacgttgc acatcatcta 320

<210> 4146
<211> 405
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089b12b1

<400> 4146

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ccattccatt taggacaatc tctctgatgt tttccgcggg gtcaaatgtc aaaaacccgg 120

caagaagatg gaaacatcca aatgttccaa agctggtcct caagccgtta aatctacagc 180

gagcaattca cctcctgagg caaagtcctg caaatcatca gatatggtaa atgttgcttc 240

agacataaag acatcaaagt cccttccttc aacaccaccc ctagtatcca gagcagatcc 300

ttcatcctct aggtgccatt ctcttcatgt ggactcattc tcaatgagga aagcacgtcg 360

atcacctgga catcaactat gtaggcagat ctcggacagc aagat 405

<210> 4147
<211> 342
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c01b1

<400> 4147

gcgtaagtta cacccggcga ggagcagccn aagagggacc gtaagaagca cagggccacc 60

aaagaggacc gcgccaagag caagaacagg aaatacctga ggaagccgaa gaaggtgaag 120

aagagcaacg gccagatgca cgccaccaac gagatcaagg agaagaaccc aaccacgaac 180

aagaacgagg gcaagaggct gcgacaccag agcaggacag gctaccacaa catgtacaag 240

gagtaccgtg acaccacact aaatggagcc gtggagcaaa ggtacacaga gatggccact 300

cgccaccgtg agagaacccc ctgcaagcag agcaacaaga cc 342

<210> 4148
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089c02b1

<400> 4148

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agtctatgac cacaacaaga aggctggtgc gatgaatgct ctagtccgtt catctgctgt 120

catgtcaaat ggacctttca tcctcaacct ggactgtgat cattatgtct acaactccca 180

agctttccgt gaaggcatgt gcttcatgat ggaccgtggt ggtgaccgta ttgcctatgt 240

ccagttcccc caacggtttg agggcattga tccatcagat cgctacgcca accacaacac 300

agtcttcttt gatgtcaaca tgcgtgcatt ggatggtctc atgggaccag tctatgtcgg 360

cactggctgt cttgtcccgc ctgttgcact ctatggatct gaccctgcgc gctccacaga 420

aca 423

<210> 4149
<211> 377
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c03b1

<400> 4149

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ccactccaaa gaggagaagc tcgccgtcta cgaacacgtg cccgggcgca gcctcttcga 120

gctcctgcac gagaacagag gcgagggcag aatgccgctg ccgtggccgg cgaggctgtc 180

gatagcgaag ggcatggcgc gcgggctggc gtacctgcac cagtcggtgc cgtttttcca 240

ccggccgccg cacggcaacc tcaagtcgtc caacgtgatc atcctgtcga cgcccaacgg 300

caagcaccag catccgcacg tggtgccgaa gctcacggac tacggcttnc acccgcttgt 360

tccgcaccac gcgcaca 377

<210> 4150

<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089c04b1

<400> 4150

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ggctctactc cgtgctctgg ggaaagcaca aggagaccca ggcggagtcc gcggccctgc 180

gggaggcgct gcctatggcc atggcctcct acacctccaa ggtgaccgga gacgccgcgt 240

cggccggacg atccggagtg cgagaaagcc aacggagcag ccaagccatc ctccaacgga 300

cacggagcta gtgcagtctg atcaatcgat tccaactgct tccaagtgct aactggcaat 360

gtctcgtcac tgacgttgca tgcactaggg ccgtgtgcgc tgcatgccag ggagagtgga 420

ataattatgc ggcgtgccat tatttttggc ctctgatgat ttcacaacca cgacttagta 480

ctc 483

<210> 4151
<211> 510
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089c05b1

<400> 4151

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accaccagcg ccaccagcac ccccaccatc attccgcgcc atccatccac catctccagc 180

caccgccgca tctggcgcga cccaccagac ccaccagact gcccgtctgg tgtccggcgc 240

gagcacgcca tccaccactt ccacccctcc ctctctgttg ttgctgctcc tccctcttgc 300

ttcgtcctgc tgcttctctt cttcccctcg ccttcctcaa ctgctgctgc tcccttctta 360

ccccaaactc tactgctgca tcttcctttc ttctccttgt ccctactact gctgctgaac 420

cgctcctcct cttgctgtgt ctctgctact cgctgctccc ctactgctga tcctttcctc 480

aactctctct gctggctctc tcatgccact 510

<210> 4152
<211> 264
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c07b1

<400> 4152

cgccttggtt accagcccac cggcagccaa cccangggga gggttgataa aaaaaggggg 60

tcctaacccc cccccgcnan gacggccacc cacaccaccc cgccacgcac cacagacacg 120

gcaaagccgg ccgcaacccc cccccacaac ccccaaacac acccccacaa ccccaccccc 180

cacccaaacc gagaaggcag gagccacaag aaggaccgcg gagcagaccg aaaagccaaa 240

gcccagcacc cccaacggca ccag 264

<210> 4153
<211> 458
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c09b1

<400> 4153

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aagcttttgg tgcctcttgt aagcgcatac cgctacgatg gcccggaggt gaacacatcg 120

ttggcacact ctgaagccaa aatactcaat ggaaagatca acgagaaggc ctacagtgat 180

gatgagatca tcaggattct cactacaagg agcaaagctc agctacttgc aacattcaac 240

agctacaatg atcagttcag tcaccccatc actaaggacc tcaaggaaga ccccaagaac 300

gagttcctct caaccctgag ggcgatcata aggtgtttca cttgccctga cagatacttt 360

gagaagaatc atccgttggc ccttggaggc gtcggcacag acgagaacac ncttacgagg 420

gtcataacca ctcgcgccga ggtggaccct gaggtgat 458

<210> 4154
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089c10b1

<400> 4154

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cgtgatcgtc gtgtccgtcg tggtgggatt ctttggggtc ggaagcgccg tgctggggct 120

catcgccgag ggcaccaagc tcgagccgaa tgacatctcg atgtccagga ccgagtgcgt 180

gtaccccgcc aacccggcgt tcgcgctggg gctggtcgcg gcgctcctgc tgctggcggc 240

ccagatcacc gtctcggccg ccggccgctg ctgcggctgc tgcaagcccc ggggcgccgc 300

cttctccgcg tccaggcgca acatcggcgt cgtcttc 337

<210> 4155
<211> 413
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c11b1

<400> 4155

cccttcatat caggccaccg cccatgacgg gaaggggngc ttcagtgcgc ctcgcgttcg 60

gtttctgtcc agaattcttg gacatgataa agtttgggtc ttagatggag gtttccctca 120

gtggcaagct tctggattca atattggaag cagctgcctt gatgatgcag ttctgaaatc 180

cagagctgct aatagtgctg ttgaaacagc ttataatggt gaattggcaa atgctgccac 240

atttcagaca gagtttcgac atcagctatt gtggacacta gaaaaggtca aacacaatgt 300

agctgctaag gctcaccaca gagttgatgc ccgagtaaag ggcagatttg atggtgtaat 360

gccagaacca agggaaggag taagaagtgg gcatataccc tgaactaaat gtg 413

<210> 4156
<211> 475
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089c12b1

<400> 4156

tggttcgctt cggaccatcg aaggccaaag cgngggtttg gtcatgactg gactgagctt 60

gctcaacgct ggtctgacca cccagatgct gctgagcctg ttccgggtga agggcatcgt 120

ccactggggc atcgctggca acgccaacga ggacctccag atcggcgacg tcaccatccc 180

cgaatactgg gcccacgtct ccctctggaa ctggcagcgg ttcggcgacg gcaaggataa 240

cgagctgtca ctggaggccg ccggcgacta cacccgggag tacggcttcc tcaacttctc 300

cgactacacc gtggggcaga gcaacccggc gctatcagcc aaccagctca acagcatctg 360

gtaccagccg gaggagatct tccccaagtc cggcgagccg gaggagcggc agcacgcgtt 420

cttggtgccc gccagcaagc ggtactacga gcttgcgaag aagctgaggg catgg 475

<210> 4157
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089d01b1

<400> 4157

acgttaagta taaagaggcg gcagcccccc caccggggag gttaacaaga agtgagggca 60

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actcacgcag cacgcgagac ctgggctccc agagggaagg tcacacgcta aaagacaaat 180

acaggagtga cccagagcga gggacaaaaa gaaacgaaag ccagccattg cggcacgcga 240

acccgacaac acacggggag aatgcaaaag ctcctgcaaa ggacacaagg ctggatgaga 300

gcacc 305

<210> 4158
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089d02b1

<400> 4158

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tacaggcagc gttttgtttc ttcccccgcg ccaatccagt cttgtgatat agatgtgtca 120

tctctctcag catgacaagt tcacaggtat tctgcttttg atgaacttgc tccacacctg 180

cagtgacaag aaaacgctga agaagtggtt cttcatcgac aagacagcgg gctaagaaaa 240

tcctgctgaa agagagacga ccaccgaact gaccacacta tttcttcgtg cgacccgatg 300

gatttgagca acggctcacc ggtcatcagt gatccgatgt caatgagcca ctcgctgatg 360

ggagtgctga ctcccaacat gatgccgatt tcaatcaggc ccggaagtta ctc 413

<210> 4159
<211> 367
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d03b1

<400> 4159

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ttgcttagac ctgggcgctt tgacagacag gtgagtgtcg atgttcctga tgtacgtgga 120

aggacagaga ttctcaaggt gcacggtagc aacaagaagt ttgatgctga tgtttccctt 180

gaggtcattg caatgagaac acctgggttc agtggagcag acctggcgaa tcttctgaat 240

gaggcagcca tattagcagg ccgacgtggg aagaccggaa tttcctcgaa ggagattgat 300

gattcaattg acagaatagt ggctggtatg gaaggaactg tcatgacaga tgggaagagc 360

aaagcct 367

<210> 4160
<211> 625
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089d04b1

<400> 4160

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gtacgccgac gtgatctact ctatcgtgtt gcaggatgat tttttgccaa gaacaccaac 180

accattggaa tatattttcg gctctatatt ctgcttgccc tgcttgttat tcctattttg 240

cttgagagat acatttaaac aagacaagaa aaagtttaaa gatccaagaa gattgtatgc 300

tcctggtcgg atgtatcata tcgtcgagag gaaattttgc agctgtgcaa gatacccacc 360

tgaggtgaga actgctattc cagtggaagg acggtttgag catattgtgt tatcgtgcag 420

taccactgct gatcatggca ttatttggat tgagcgagaa tcagccttgg ctttagagct 480

aatgaaggaa aaagagaagg caacaactcc acctgctgaa caaaagatgg agagattgca 540

aagtttcaag gaagacacaa gaatgcgctc acagggcgaa aacctggatg ttcctatgcg 600

aagacatctc tgaagagaac ccatg 625

<210> 4161
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089d05b1

<400> 4161

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aggacacggg actcggctgc accgatgggg gcgcacgagc actcttacta cggagccacg 120

tacccgcggg cggcggcagg acgatccaga tcgacagcca aagctccgag gccaagcgcc 180

gcgccggcga ccgagccaca tcgaccgacg aggacacgtg gcgcgacgtg gcgtcgctgg 240

cgtgcgacgg ctcgccggcg tgcgtgcggg agctcgcgga cacgaggagc gtggcgatcg 300

aggtgcggag gaggcagaag aagatcatgg ggcgcgccgg gacgacagag ctgcttggcc 360

gcgcccaagg agcatggagg gacgtgggtg acc 393

<210> 4162
<211> 347
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d06b1

<400> 4162

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ggggcaagcg agagccattg tccccaccaa gggcgagggg ccggccatcg gcatcgacct 120

cgtcaccacc tactcgtgcg tatgcgtttg gcaccacgac cgcgtcgaga tcattgccaa 180

ctaccagggc atatcgtcca cgccctagta cgtaaccttg actctacttg gagcgaatat 240

tatgagatgc ctaaaagaac caggtcttca ttatccccat caacaccgtc ttccatgcga 300

accgttttat cgggctctgg gtttgctgat gcccctgtcc atagtga 347

<210> 4163
<211> 399
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d07b1

<400> 4163

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gctctcatag ccctccgggc aagactatat gaattggaaa ggcataggct ccatacagac 120

cggtcgaagc tccgatcaga gcagattgga agtggtgaca ggtccgagcg catcagaaca 180

tacaacttcc cacaagggcg tgtcactgac catcgtgtcg gggtcacgca ccactccata 240

gtggacgtca tggagggaga gagcctggac gtcttcatcg aagcgctgct gctgcaagaa 300

gagatggatg caattgcttc gtttgcttcg tgagccctaa tttttgtgga tttcttcctg 360

gagcgacaaa ccgcatcata aacacactga acactgaac 399

<210> 4164
<211> 300
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d08b1

<400> 4164

cggctagata cccagccacc aaacccancc caanaggggn gggttggaag aaaagaaagc 60

ggacagacca ccccgcggag gaggaggagg agaccacgcc gccgcccgga ggcaagcaca 120

tcacccagga ggagggcgcc aagcacagcc ccaaggacga cagcaggcac gacaccggcg 180

gcaaggagca caaggcgacc aagccaccag aggaccaccc tggaggcgac gacgacacgc 240

tgactacaac cgccaaggac gcgaccgacg acttcgagga cgtgggacac agcacaaccg 300

<210> 4165
<211> 424
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d09b1

<400> 4165

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gcacgggggg gtatgagaaa acagacggag cgccaccgcc agggngccgc ccgcgcagca 120

accacccccg ggaccgagac caccggcggg cggcgggcaa ggaggcggca ccgatgggga 180

agaccccggc caagaggcac aagaccgcgc ccaccgggaa gaagaccacc aggactggcc 240

ccgccaaggc caaggacaaa acggccggga gcaacagagg agacgccgcc ggcgggaagg 300

agcccgggaa cacggagagc accccagaga cccccgagcc ggagncacga acaccgcgca 360

acaatgacgc cgagccggaa gaggggaagg gtgagaaaac cagcaccgaa ggcgaaacgg 420

cggc 424

<210> 4166
<211> 417
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d10b1

<400> 4166

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atgagaccgt taataccaat ttggtggagg tggtactact gggcaaaccc cgtgtcctgg 120

accatatatg gcgtcatcgg gtcgcagttt ggcgataaca ccagcccagt gtcggtcacc 180

ggtgggagcc tcgcggtggt gaagcaattc ttggaggacg gtatgggcat taagcacgat 240

ttccttgggt atgtcgtgct cgcgcatttc gcgtacgtca tcggcttctt cttggtgttt 300

gcttactcca tcaaggtgtt gaacttccag aaacgttagg aatgcaggcg tcccaatcca 360

tagtttgtgt gtatatctgt atagcaggat acatacgtaa gcattgttgc ataaact 417

<210> 4167
<211> 269
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089d11b1

<400> 4167

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cacgcacgca cccanggcag cggacagcaa gcagcanagc ccgcagcagc cgccgccggc 120

cggaagcgag ggcggcggcg acgacgaggg gcacggggcg gccagcaagc ggcaggagag 180

caacctgaga gaccagtcgg agccgcgggc gcggcggaag agcgcggcga ccgcggagga 240

gatgcggacg caggagcggc cggcggcgc 269

<210> 4168
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089d12b1

<400> 4168

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accatatcaa ctagtttcaa ttgtctctgg tgctcttaat gatgctgcag ctaacaagta 120

tgatttggaa gcatggttcc ctgcatcaaa aaccttccga gaattagtgt cctgttcaaa 180

ttgcacagat tatcaggcaa ggagacttgg aataggctat ggccagaaaa agaatgatga 240

gcaatcgaag cagttcgttc atatgttgaa ttccacgctg actgcaactg agaggacact 300

ttgctgtatt ctggagaact ac 322

<210> 4169
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089e01b1

<400> 4169

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cgacgccacc tgagacctaa ccacctcggc tgctagtgct agacgggcac ggcctcgccg 120

actccttctt ccatcagggt ttggtctcat ctgtgggagc tcacgctctt ggatccaagt 180

tcaggtttga tctgtgagga agttcgattt gcaactctgc agtgctattc cgaaccggaa 240

gcttgatcat ggaaggggcc actcccactc ccgctgcctc aaacacaagg attgctgtgg 300

tcaccggcgg gagcacaggg atcgggctgg atgcgtgcaa gcagctggc 349

<210> 4170
<211> 458
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089e03b1

<400> 4170

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tcctgtttcc aactcaaaac aggcatccca tacagggtta tctcctgatc cttttgatgg 120

gaatggacct cataaaaaga caaagaagcc taaagcatgg tccaacaagg aggatgcaga 180

cttaatggat ggtgtacata agtgtggtga aggaaattgg ctgaacattc tgcgtaaata 240

taacttcgat agcacaagaa cttatgttca attgtctcag agatgggcag tcatttgcag 300

gcgtcaagga acaaccaagc ttgctaaagt taaatcagtc accacggagt tcgatataaa 360

agctactcaa aggcattctc tatggctctt gatatgccta tggngacagc ctgtggattc 420

tctacattaa gattaggagc ttcacaacan agcgctca 458

<210> 4171
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089e05b1

<400> 4171

aaggtacttg cgttgacaac atgcactatt taaatgatgg cctgtgtaag gtactctctg 60

cttttccctc taccttatga aatactccct ccattcctaa aatataagcc ctttcagaga 120

ttccaatacg gactacatat ggagcaaaat gagttacact ctaaaatatg tctatataca 180

tctgtatgta gtccatgttg aaatctctag aagggcttat atttagaaac ggagggacta 240

gttgctgtaa ctgaagcgca tatcaagtgg ctttgccaga tttgtgacaa ttagtaccag 300

acggtgattg ccagcccttt ttacccttgc aatatgttca tgattgccgc agcaagctca 360

ctccttgggg agcagagaca gagcagagat tcagttagaa gcataacaca tatgctact 419

<210> 4172
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089e06b1

<400> 4172

ccacgtgaac ccggacgcgt gggctggtgg tggcggcgct gttgcttcta tctgtatctg 60

tgttgcttaa gtttgatgtg tgatgtggaa actgttatgt taattattat ggctttgatt 120

gaaccggttg taaagtttgt aagtggattt tgcatttcat agtattatca tatcactgcc 180

atttatacaa gtgatagcgg tggactgtgg cgcactctcg cgctgtacac gtaggattta 240

ttgtccgtgc ggtcgttttt cttgcgtg 268

<210> 4173
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089e08b1

<400> 4173

tagttgcgca ggcaagggag gaggagagcg ggggcgaata tgagtgaaac tgacgctgca 60

taagcgcctg gcctcgagcg tcctcaagtg cggcaagggc aaggtctggc tcgaccccaa 120

tgaggtcaac gagatctcca tggccaactc ccggcagaac atccggaagc tgggaaagga 180

tggttgcatc atcaggaagc ctcagaagat ccactccagg tctcgtgcaa ggagggcaca 240

tgaggccaag cagaagggcc gtcactctgg atatggtaag cgtaggggta ccagggaggc 300

taggctcccc accaagatcc tgtggatgcg gaggatgcgc gtcctgaggc gccttctgcg 360

caagtaccgt gaggccaaga agatcgacat gcacatgtac catgacatgt acctgaaggt 420

caagggtaac at 432

<210> 4174
<211> 233
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089e09b1

<400> 4174

tttactatcg gcatccatgg cgtcaccccc ggggnggttt ttaattaaan naggcgttcc 60

tttaatttcc cccnaaaaag aaaaaaanta aaaacaccat caccaaaaaa aacacttaaa 120

agaaaagaac acccaaaaaa gaacaacaaa cccaaaacat ggaccaacaa agaagaagca 180

aacttaaagg aaggggtaca taaatggggg gaaagaaatt ggctgaacat tct 233

<210> 4175
<211> 211
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089e10b1

<400> 4175

ccccggtgga ggcagcggcc cttttcaaca aacttggaag gacaagaaac attagcgcgg 60

gcggttcccc cccaccgggg ancaggacgg accgccccga cgagggcagg ggccccgggg 120

gcgcgcggaa ccccgcgcgc gacagcatgg ccataacggc ccaggggggg gggcggccgg 180

caggcgcctg cacgccggcg gccaggcccg g 211

<210> 4176
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089f01b1

<400> 4176

gcattcaata tttccgccac tcacaccgac ctccgggccg gcttacattt aatcctggcc 60

accgtcacca gctccatcga ctacggctca cccacctctg ctgcctccct ggaagccgcc 120

gccctcctca acctctccgt ggcactcgct gacccctcgg gcaacctttc cgcgcactgg 180

acgccggcca cgccgctctg ctcgtggccg cgcctctcct gcgacgccgc cggctcccgc 240

gtcatctccc tcgacctctc cgccctcaac ctcaccggcc ccatccacgc cgccgccctc 300

tcctccgtcc cgcacctacg gaccc 325

<210> 4177

<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089f02b1

<400> 4177

ccgcttcata acctacaggc tggagaacca gaaggagggc attttgttcc aaactggggt 60

gcgctaggcc acctatgagg agttcaccaa gaccctccct gagaatgact gccgattcgc 120

ggtgttcgac ttcgacttca ccaccccgga ggatgtgcca aagagcagga tcttctatat 180

cttctggtcc ccggacaccg caaaggtgag gagcaagatg acgtacgcga gcaccaacga 240

gaagttcaag aggaccctgg acggcatcca gatcgagatg caggccactg accccagcga 300

aatcagcctg gacgtgatca aggagcgcgc gcactaaggc aaatcatccc aatgcctcgc 360

aatatggatt tatgtcaaat atagatttgg cggtgtgact cttgaaactc tcttgatgat 420

tt 422

<210> 4178
<211> 404
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f03b1

<400> 4178

ctgctaactc cagagaccga gcgaggaaag ttgcgggggg atacctgaga gtcagggaga 60

tatggctggg attggtccta tcaggcagga ctgggagccg atagtggtgc ggaagaaggc 120

gcagaacgcc gccgacaaga aggacgaaaa ggccgtcaac gctgcccgcc gctccggcgc 180

cgagatcgac accaccaaga agtacaacgc tggaacgaac aaggctgcat ctagcggaac 240

ttccctcaac accaagcggc tcgacgacga caccgagaac ctttcccatg agcgtgtttc 300

aagtgacctg aagaaaaacc ttatgcaagc aaggctggat aagaagatga cccangcaca 360

acttgctcag atgatcaatg agaagccaca ggtgatccan gagt 404

<210> 4179
<211> 393
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f04b1

<400> 4179

gcgttgcata ctactcctgg cgannacttc gncggccggg cgtcaatcca cgagcagaac 60

acgtcagcgc cggcggctaa accgggcttc ttggccaaat tctgtccatg cctcgccggc 120

ggtggagcca ccagctagac cgacaagccc agccaccgtg cgccgtgcgc gtgaccacgg 180

gaggatttga agtggaatcg ggtccatgag tctcaattct gtattggaac tgtgcgagtt 240

ctcttcatct ttggaagctc tgctctgttt ttcttgcttt ctctagcatt tgattcctgc 300

gtattcattc gtgtaatgcc gacagacgta aactcgacca aattgccacc cgtccatgtg 360

aaatgaaaat gatgttgatt tggtcaattg tat 393

<210> 4180
<211> 545
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089f05b1

<400> 4180

ttcataccta aacgaaatga aaaaataaag gtagcgcaca atgcactcac tctctctctc 60

tctctctctc tctctctctc tctgatatga tattacagcc tactagtata cagaaatgct 120

ggagctccag cttgacaacg atcagttgtc gcagaaagcg cggagggttt cgtccagggc 180

tttcctgtcg tactcgccgg tgaaaacgca gcctcccaga ggtcctttca gaaggatgag 240

cctcaacaat ccgtccgcga ccttcttgtc gaccgccatg atgtttctga acttctctac 300

cgtcatgccc tttggtggtg tcacgggaag cttggcttga tctagtatgt caaatgtccg 360

tttcttgatg gactcgtcta tccagcccag gcggtaagac atgtcagctg ccataaccgt 420

tccagcagca acagcctccc cgtggagcca ttctccatag ccaagccctg tttctatagc 480

atgaccaaat gtatgacccc aggttagtgt gctcgaagac cactttcctt ctcatcctga 540

gcaac 545

<210> 4181
<211> 507
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f06b1

<400> 4181

gctttgattt tcgctgaagc ttctgctcag gcatgtagct tctaagacag tggctcctaa 60

cgtggataag ctggttgccc ttgttcaccg tcctaatgaa tcgttcttcc ttgctcccca 120

ggcagacaaa gttacggttg tatacccaat gaggttccag gattcgattg atatcgtctt 180

ggcaacttcg tttctgcagg aatttgtaga agcaaggcgg actgctgcac ttaacaatgc 240

cccttcctgt atgtggtctc cagtaccacc tcttgagtta aaaggcgtga atgctgatgc 300

acttgatgca aatgctggtt ttgttacttt tgttgttttc cctcggcatg ttgagggtag 360

aaagctagac aaaacagttt ggagtttgtt aacctttcat gcttatgtaa gctaccatgt 420

aaagtgctct gaaggattca tgcacaccan gatgaggcgt acagttgagt ctctgatcca 480

ggccttggac cgttgctaat ccgatgc 507

<210> 4182
<211> 427
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f07b1

<400> 4182

cccttcctta cgtccgccac gcgaccggag aaanggcagg actttagtct acacggcggt 60

cattcttcta tgaacgtgct gggaaggtgc aatgtcttgg cagtccagac cggacaggca 120

gtgtcacaat tgttggcgcc gtctctcctc ctggaggaga tttttcagat cctgttacct 180

ctgcaaccct cagtattgtg caggtcttct ggggactgga taagaagctg gctcaaagaa 240

agcatttccc atctgttaat tggctcattt cttactcaaa atactccacg gctttggaag 300

gatactatga aaagttcgac cctggcttta ttgacatgag aacaaaagct cgtgaagtgt 360

tgcagagaga ggatgatcta aacgaaattg ccagcttgtt ggaaaagatg cactgggaga 420

atctgac 427

<210> 4183

<211> 482
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f08b1

<400> 4183

cctacatgcg accgcagccc tgaaatcccc atggcctggt ttgtatacct cctctctccc 60

gtccctctcc ccctctctcc tccctagggt tcgggtctct cctcccccgt cgccatgatg 120

cagccaccgc cgccgtcgca gccgcagccg ggcatgggcg cccccatgcc cccgcagggc 180

gcgggagggc agccgccgca ctggggcgcg atcccgccgc cgatgccgca ctacgcgcag 240

ccgcccccgc agcagcagcc gccgccgcag gcgatgtggg gccagccgcc gccccaggcc 300

gcgccctacg gccaggtgcc cgccccgcag cagtactacg ccgnngccga ggcccccgcc 360

gcccccgccg cctnggacga ggtcaggacg ctctggatcg gggacctcca gtactggatg 420

gacgagaact acatctacag ctgcttcgct aacaccgggg agttccagtc tgtcaagctt 480

at 482

<210> 4184
<211> 366
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f09b1

<400> 4184

ccctgcgttc ggcncgccca anaaaaaaaa aaaggggggt tttaaacaaa gagggccaaa 60

tttatagcga cccaagaata gaaataggga tacaaaccac atacaaataa tattacaagc 120

aaaaaagtag aagaacgtta ataagcagga atagccagta ccagcctaaa tacttttatt 180

aactgtacac ttctgtttct ggttttattt tttccaatac cttctcagca tcaataaagc 240

cccctaaggg gcccaacggg gtatatttta cttgcctcca actgggtata aatggcagtg 300

ccaggcagtg aagatggagg tgatcaatac tataaaatgg tggctgatga aaaccaaatc 360

tatgtt 366

<210> 4185

<211> 366
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089f10b1

<400> 4185

ccctacatac cctcgccgac acgccgccga caccaccgga gttagataag agaaacaacg 60

attgagaaca actcgncggg agggctcgag atctgtgttc ggagagggga attcttgagg 120

tcggaatcgg aacaagcggg cgcgctcggg atcggggtta ccatacaatt tttcccagga 180

acctttagtg aatgtgctaa tggagtcaaa gggtggcaaa aagtctagca gtagtagttc 240

cctgatgtac gaagctcccc tcggctacag cattgaagac gttcgacctg ctggaggcgc 300

caagaagttc tctgctgcat actcgaactg cgcgaagaag ccatcctgat atcgtatttg 360

catccc 366

<210> 4186
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089f11b1

<400> 4186

gtacacaccc acgacggaga accgaggacg attaagttcc ttggatcgtt catttcatgg 60

actctcatca ttgatgttgt tgaagaggat acaccagttg aggaaaaagt cattgagatt 120

atatgcaaga agctgccaaa actgcgggta ctagccgttg ctttcagcaa gaaacatcat 180

ggaatcagga aacccaataa gttctcggtc ccaacatcta ttgctcagtt aaagcaccta 240

cgctatcttg ctttcaagac ataccactca tgctttgtaa ctttaccaag aacactaact 300

aaacttcacc atatccagct gctagatttt tacgagggcc taatgttgga attccccttt 360

gctgaccgtg tcaacttgcg gcacatgttc t 391

<210> 4187
<211> 519
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: uC-tsro9316089f12b1

<400> 4187

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tgcaccgacg gcggccaccg tgagctcttc actgttgctt gggatcgcag ggctcccgga 120

taccaagttc aagagtgcca tagataccgc attggtagat ggtgaatgta acacaatgga 180

gaagcccggg gaccggatgt cctgttacct taccaaggcc ctggggaatg ttggagctga 240

gctggctcat caagttcctg gaagagtgtc cacggaaata gatgctcgat tggcttacaa 300

tacccaagga atcgtccaga gggtgcatga actgttgcag atatacaatg aacatgatat 360

cccatcagaa cgtctgttat tcaaaattcc tgctacatgg caaggtatag aagcgtcaag 420

attactngaa tctgaaggaa ctcaaacaca tctaacattc gtttacagtt ttgcacaagc 480

agcagctgca gcgcaagctg gtgcatccgt cgtacaaat 519

<210> 4188
<211> 356
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g01b1

<400> 4188

cccatgcgtt cggcagcggc gaccgcgccc atcacggcca ccacccgcct gacggagccc 60

ttccctccca tcggcggcgg agatggtggg gtggctcaag gcgctggtgt acggcgcagg 120

gggcatggcg gtggtgggcc tggcggcgct ggtggcgctg caggagcgcc tcgtctacgt 180

gcccgtgctc cctggcctcc ctcgcgctta ccccatcaag ccctcgcgcc tncgnctcat 240

ctacgaggac gtntggctcc gggccgccga cggcgtgcgc ctccactcct ggttcctccg 300

ccactctccc acctgccgag gtccgaccat tctgttcttt caggaaaatg ccggca 356

<210> 4189
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089g02b1

<400> 4189

aggctgaggc agcagaagca ccatggattc cctgtgtcac tcctacgtca ttgtccttgt 60

gctcctattc attggaggat ccgatgccaa cccagccgcc cgtcgccaca gtcagctgga 120

tgtaaaccac aagaagcagc cactacagac attcaggcct tacaacattg cccacagggg 180

ttccaatggc gaaatacccg aggagacagc tgcggcatat ttgagggcta tcgacgaagg 240

tgcagacttc attgagactg atatacttgc atcagaggac ggtcatctga tatgtcttca 300

tgatgtaaca ctggataaca caaccgacat cgccagccgt actgagttcg ctggcaggaa 360

gagacctatg aagtcaggga gtaatatgac tggttggt 398

<210> 4190
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089g03b1

<400> 4190

gccgtcgatg acttcgctct gtagcagctc tcgcgcggat cataccatat ggcgacggct 60

atccaccagc tctccttcgc cgcgccgagc gcgggcgcca ggcggcggct gacccgggcg 120

tccgcgtccg cgacggaccg gcacgaggtg ctgtcgccca agcgccggct gccgctgcgg 180

aaagtgccgg gcgagcacgg cccgccgctg ccgggcgcgc tcaaggaccg gctggagtac 240

ttctacgggc ccggcgggcg cgacggcttc ttcgcggcgc gcgtccgcgc gcaccgctcc 300

acggtgggtg cgcctcaaac a 321

<210> 4191
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089g05b1

<400> 4191

cggacttcgt gggtacagta tttgttcgag tgcttccgac attgtgctta cggagccatg 60

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ctacacgatc tatgcagttt ccatcaccat ccgtattgtg cttggcttta tgcttattgc 180

cctgatctgg aaatttgatt tcgctccctt catggtcctt atcattgcca tcctcaatga 240

tggtactatc atgacaatat ccaaggacag agttaagcca tctcccttgc ccgacagctg 300

gaagctcaat gaaatcttcg ccactggtgt tgtgctcgga acctaccttg ccctgatgac 360

tgtcgtcttc ttctgggtta tccacaagac ggacttcttc acaaacaaat tcggtgtcag 420

gtcaatcaga gacagtgagt ttgagatgat gtc 453

<210> 4192
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089g06b1

<400> 4192

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gtttgcgtgc gctcttacag tttgattgag aaactcatat tttcctgtag attgggaagg 120

atgtcgagta cctcctggtg gcaaagcttt ctgcagcagt ttagtattgt tcccaaattg 180

ttcagatccg aaggtgttgc catttatgtt gcgcggcttg cttgcattgg tttctcctca 240

acctgaactg aacacatttt ctttcttcag tgtgtaatgg agaaaggaaa tggttgataa 300

aaccaagagg cacagacaga gatgtgctgc atcagagtac ttctctagat tggtgcgctg 360

gaaatgttca acgatctatg atcgactgca ttgatcaaaa agaagagaaa aaaaaacagg 420

gactcagcag ctgcttggaa tctgctc 447

<210> 4193
<211> 482
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g07b1

<400> 4193

gattgatatc tccaatnaaa ctccacgaga cggggccaaa ttgtgacacc ggagcagtcc 60

agtcccaaat ccccctttc ggccggccac gacctcttcc tccacaaaat cctccccgga 120

attccgccga gtccccggta gccggccgcc gatcggtcga ttcgcggggg gcgggatgag 180

cttccaggac ctggaggccg ggaacggcgt ccgtgggacg ccgcggagga acggccgggc 240

ggcgggggcc ggcgccggct cgtcgcaggc cgtcgcgtcg ggcgtctttc agatcaacac 300

ggcggtggca accttccagc gcctcgtcaa cacgctcggc acccccaagg acacgcccga 360

cctccgcgat aggatacaca agacacgagc acacataaca caactggtga aggatacatc 420

ngagaagctt aagcaagcta gtgaggcgga tcatcgtctt gaagcacccc taccaaaaag 480

at 482

<210> 4194
<211> 297
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g09b1

<400> 4194

tacattccta ccccgacccc nggnccgacc ggggggggtt taaatgaaaa aggggtttc 60

ttcactcccc gcgcatncta accttcgccc ttcttcttcc ccatttcggc agggggggcag 120

cccaccaacc acccccaccc ggcgccatga gggagtgcat ctcgatccac atcggccagg 180

ccggcatcca agtcgggaac gcgtgctggg agctctactg cctcgagcat ggcattcaac 240

ctgaaggcca gatgcccggt gacaagaccg caggggggagg tgaagatgct ttcaaca 297

<210> 4195
<211> 464
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g10b1

<400> 4195

ccttaaatat gaggaagcga ggcggatctt tctggcaagg ttatgtaaat gattatgatt 60

tttaggataa gataaatttc gctgtattcc cttcactgca aggagggccg cataataacc 120

atattgctgc tttagcgata acgctgaagc aagttgcgac gcctgaatat aaagcataca 180

ttcaacaagt taagaaaaat gctcaagctt tggcatcggc cttgctcaga agaaaatgca 240

gattggttac tggtggcact gataatcact tggtgctttg ggacctcaga acttttggct 300

tgaccgggaa gaactttgag aaggtctgtg agctgtgcca catctctata aataagacac 360

cgatatatgg ngataatggc tcaatatctc ccggtggcgt gcgtattgga acaccttgca 420

tgactactag agngtgccta gaagatgact tcgaggtgat cgca 464

<210> 4196
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g11b1

<400> 4196

ttcgctgccg cagccgccac ctcctccgca ggcagcccac tgcgaagcga ggtcgaataa 60

gccatggcag acgccaaggc cacgacggcg gtcaccctcc gcacccgcaa gttcatgacc 120

aaccgcctgc tcgcccgcaa gcagttcgtg ctcgaggtca tccaccccgg ccgcgccaac 180

gtctccaagg cggagctgaa ggagaggctg gccaaggtgt acgaggtgaa ggaccccaac 240

tgcatcttcg tgttcaagtt ccgcacccac ttcggaggcg gcaagtcctc cggattcggt 300

ctcatctacg acaacctcga atctgccaag aagttcgagc ccaagtaccg cctcatcagg 360

aacggccttg ctaccaaggt agagaagtca cgcangcaga tcaaggaaag gaagaacagg 420

acaaagaaga tccgtggtgt ga 442

<210> 4197
<211> 484
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089g12b1

<400> 4197

ttgcattgtc gactacgcca ctggcattac catccatggt tcctacctca ttgattagcc 60

ggaaagtctc tacaagatgg ccagatgata acaacttcta tgaggccact ataacccgtt 120

acaatcctgc tacaggcgaa catgctcttg tctatgacat gggcaaaaca actgagtcat 180

gggagtctgt caggctttgt gatatgagac ctgaagatat aagatgggaa cgtgatgatc 240

aaggcatctc aaatcgagat agttggggcc cttctggtcc attgttgaac aggaaccaaa 300

acaacaatgg tagagggaga ctatctcaga atgagcatcc aaataaatat ggtccacctc 360

aaaatggcat caacaggaat attggtgaaa ttgacgtgcc taacactcag agtgtcntga 420

ttgaggtgga gagggtatng tcaaatccaa tatgcatgaa attgaaaggg caaagaactg 480

ctac 484

<210> 4198
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089h01b1

<400> 4198

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ctcgggctcc atctccaagg attctgttcc cgagtcgtac gtgatcctgc tgaagcgtga 120

gctcgagcca cagccacaca ggcaggat 148

<210> 4199
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089h03b1

<400> 4199

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ccatggacag tggaagcacc at 202

<210> 4200
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089h05b1

<400> 4200

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cttttacttc aagagcggag cgtgccggca tggggaccgg ggctaccggc tgcacaacag 120

gccaaccaca tcggcaacta tagtgcttgc taacatgaac cagcggcctg atatgaggac 180

ccctggagtc gatgcccaag gtgtggctat tgcaccagag aagaagcagg agcactacga 240

ggactactat gaggatatct atgcagagct gaacaagaat ggtgaggttg agaccatgaa 300

tgtgtgcgac aaccatgccg accacatgac agggaatgac tctgtgcagt gcacggagg 359

<210> 4201
<211> 518
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089h06b1

<400> 4201

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tctacgaggc gcccggcgcg cacggccgct acatctgcgc cgagggcacc acgctccacc 180

gcggcgagct ctgccgcgtc ctctgcaagc tcttccccga gtaccccgta cccaccaagt 240

gcaaggacga ggtgaaccca ccggtgaaag ggtacaaatt cacgaaccag aggctcaagg 300

acctggggat ggagttcgtg ccggtgctgc agagcatata cgagacggtg aagagcctcc 360

aggagaaagg gatgctgccg gtgctaccgc caggcgacga cgtccgagac aacctgcatg 420

agcagctcat gatgaagccc gcccagttgc tacgtaatta attatactct acatttggta 480

gggatatatg ctgtcggcta gttaattcta tgggacat 518

<210> 4202
<211> 51
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089h07b1

<400> 4202

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<210> 4203
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316089h08b1

<400> 4203

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gtgttggcag ggattccgcc tcttatacgc ctgcccgcct cgccagattc ctcacagctt 120

ccctgccccg agcggagatc ctgaactccg gaggccgacg tcgggggtta gattcggcgg 180

ccatgtcggg cgccgcgctg gtcgccatag cggcgtcca 219

<210> 4204
<211> 261
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089h09b1

<400> 4204

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ccctacctac atgatccgag ctattccgag taatgcagca gacaatgtct actgcacact 120

gctggctcac agtgccatcc atggcgcaat ggcgggatac agcttcactg ctgggatggt 180

caatggcaga catgcctaca tacctttta tagggtgacg tccacacgga acaagggtaa 240

agatcactga ccggatgtgg g 261

<210> 4205
<211> 520
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089h11b1

<400> 4205

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tcgtcgcctt ctccgcggag cttggagttt tcggcgagat gttcgggcgc gggccgccga 120

agaagagcga cagcacgcgc tactacgaga tcctgggcgt gcccaaggac gcgtcccagg 180

acgacctcaa gaaggcctac cgcaaggccg ccatcaagaa ccaccccgac aagggaggcg 240

acccagagaa gttcaaggag ctagctcagg cttatgaggt tctgagtgat cctgagaagc 300

gagagatcta tgaccagtat ggtgaggatg ccctcaagga gggaatggga ggtggaggaa 360

tgcatgatcc ttttgacatc ttccagtcat tctttggtgg tggcggcaac cccttcggag 420

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gggtaagcct gaggaactgt acacggacat caaagagctc 520

<210> 4206
<211> 512
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316089h12b1

<400> 4206

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ggaggctgta gccccggatg tcgtcggccg ggagggcgag ggccgcgagc ctggcggcgg 120

tggcggtgcg gatggtggtg ggggcggcag cgcggcccgc gccgagcgcg gcgctgatga 180

tggcggcggt gcgggggggag gacacggagt tcgggacggc gtcctggtgg gcgtacgcgg 240

ccctgtccgc cttcctagtg ctgctggccg ggatcatgtc ggggctcacc ctgggcctca 300

tgtcgctcgg ccccgtggat ctggagatcc tcatgcgcag cggcaccgac gccgagaagg 360

cccaggccgc tgcgatcctt ccggttgtaa agaagcagca ccagcttctt gtcactctgc 420

tgctgtgtaa tgcttgtgcc atggaggctc tccctatatt ccttgacagg attttcaatc 480

ctgttcttgc tattatattg tcagtgactt tt 512

<210> 4207
<211> 507
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090a06b1

<400> 4207

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gactgcttct cggccccttc tagatcagcc atctgctgat ccatacacag cggctttcac 120

gaaactcagc gtgctcgctg agcaaagagg ggatgcttat gcaaacgccg atgtaagggt 180

tcctcttgaa gagcttgcag ctaaaaaggg ccatgatgac gtctctcagc taaccccaac 240

tgatattgct gtcgaggccc tgcaaaagat taagaatttt gccactgagc attccatggc 300

cagtggccca ttcgacgact tataaattgc cgccaggaga ccaacaatgc aatccttgta 360

ggatttcggc ccaattttgt ttgtaccgtg tatcttcatt tttgtttcgc tcaacattat 420

tgattcattc tttatactga aaaaggagct gtgctgaagc atgctctgaa acataaaaaa 480

atagcggatt gagctaatgt taagagc 507

<210> 4208
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090a07b1

<400> 4208

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tatgcaaacc tgtggcatca actgctagga aaggggggagt ttgtagagac agaaaatata 120

acagtgatcg agcaacaacc cgcggagcca gagaatattt atgttggggt tgtgaattac 180

tacgttcgag aaagctgtca aaattgagaa aacacatttg gaaatagatg taatagacca 240

tctaccgttt tcatgaggtt aagctctttt ttttttggaa caaaggactc tcattggtaa 300

acctatagga attttgctat gaggcacttt ggattggagg aatggaccta tgaaatggcg 360

gatctaatta ttatat 376

<210> 4209
<211> 129
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090a09b1

<400> 4209

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agctagcatc cccggggtgg gccctaatac caccttcaat agggtcccca aaaccgactg 120

tcaccggcc 129

<210> 4210

<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090a12b1

<400> 4210

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cagtgtgcgc ggtatctcag tcccctgttt gagttctgca ggaagaaggt tcttcctgat 120

gacatccgca aagcattgct ctttattgtg gactgctgca tgaagcgtga ttatttgcaa 180

gcaatggacc aatacatcaa gctggccatt ggcaacgcgc catggcctat tggagtcact 240

atggttggta tccacgagcg ttctgcacga gagaagattt acacgaatag tgtggctcat 300

atcatgaacg acgagaccac tcgcaagtac cttcagtcga tcaagaggct tatgaccctt 360

tgccagcggc gttatcctgc cctgccctcc aaatcagtgg agttcaacag cctggcaaat 420

gggagtgac 429

<210> 4211
<211> 227
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090b01b1

<400> 4211

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ctgatctgac ggagcatggc agcgccgtcg gccaggtcgc cgtcgtggtc gtcctcggcg 120

tggcgcctga gaacaaggcg gagcagttcg aggtggccgt cgggcagtcc ggctagggct 180

gcaactgcgg cgacaactgc aagtgcaacc cctgcaactg taaagct 227

<210> 4212
<211> 332
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090b04b1

<400> 4212

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tacatgttca agtatgacac tggccatgga cagtggaagc accatgaagt taaggtgaaa 180

gacttcaaga cccttctctt cggccagaaa gaggtagctg cgccagggtg caggaaccct 240

gacgagatcc catgggctgc tgctggagct gagtacgatg ctgagtccac cggtgctttc 300

actggcaagg accaggctgc agctcacatt aa 332

<210> 4213
<211> 100
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090b05b1

<400> 4213

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acttcttgat agaagatttg agacgttgga tattttgttc 100

<210> 4214
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090b06b1

<400> 4214

ggaagccggc gtgggggagt gttgttcagc tcatgcccgc cttcatcggc cacacgctcg 60

tcgacaaggt gctcagctcc aagaccgtcc tccagaaggc ccgcgccgct ggcggccccg 120

gcccagccgc caagcccacc aggatcgccg agtgcctgat cggcgacgag accggctgcg 180

tcctcttcac cgcccgcaac gaccaggttg atgttctgaa gcctggcaac actgtgatta 240

ttccgcaatg caaagattgc tatgttcaaa g 271

<210> 4215
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090b08b1

<400> 4215

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attaatgtgt tcatggcgaa ccgcagccgg atccgtcaga agatggtcga gttcgatgac 120

aactacaagc tgggagacct ctatgacatg aggatctcca aggaggtagc tgtggatctt 180

ctgggtgagg tattcaaggt gactatctac aagatcatgg gcggatgtga ctagcaggag 240

ttctcgcaga atcatgg 257

<210> 4216
<211> 266
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090b09b1

<400> 4216

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ggaatcttca gtggagcata tagcttggca tatcaaaaat tatagagtac taattagcac 120

atattcttcc ctctttatct tttctctctt ctctcttatg ttttctttct ctctcatctc 180

tcttttctct cttctatctt acccccttg taaaaaaaac attaggtcaa atttggacct 240

aaaaacttca gaatgatgat tatctg 266

<210> 4217
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090c03b1

<400> 4217

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agctactgca cttcatgtag ttaggatcaa ttctctgttt cagtttgaaa tattccccat 120

ttcctcctat ttgattgatt catctgatgg acattttgtc aggcaaataa acaaaaggca 180

tatgtattgt tacgagtgaa gccatccata ctcccatgtg gaattcaaga aatagagaaa 240

tgttattgtt ctacgagaac atactgtgga cgtccaac 278

<210> 4218

<211> 296
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090c12b1

<400> 4218

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gggatgagaa gaggaagctc gcaaggaaat cagtgttgag actgaaaatg gatcttcaac 120

tagtatcctg gagagatgca atgatatctc ccaactccct tccaagatga ggccttttt 180

ttgacaaaaa tggtggtgta agaatagatg tgaggtttgt gttgtttatt cttgatatcg 240

gcggattgag atattgtatt acgggtccct tttaatgtct cgtgcttttg tctttc 296

<210> 4219
<211> 203
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090d11b1

<400> 4219

aaaaaaaaaa agaaagaaaa aatacaaccc ccaaaaaaaa aagaactggc cagtaaacca 60

agatcataaa aaaaaaaaag gggggggcgt ttccaggata ccaaatttta ctccgcgggg 120

tgaacaatat tattcctttt ttaaggggcc cctaaaataa tacctagggg ggcattttac 180

acaccatcgc gggggggaaaa acc 203

<210> 4220
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e04b1

<400> 4220

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ttgttctgct catgttcatt tttcttggct gccattgtga cggctttgta gctcaggtag 120

gaaggggggga gtgacacggc cgttgaacgg gagcaaagga gtgtagctgg ttcgtcagat 180

tcggatcggt ccgtgtaggc gcttgtgtat tttgtatatg gcgtttttcg tatgtgcagg 240

tgagtctggg ggatatatat acatcagggg attggattat tcatggatgt ttggtgcgat 300

gatgaacaat aatgtgacga ttctttgtag ggtaattgga agaactgtga tgttcttgtg 360

c 361

<210> 4221
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e05b1

<400> 4221

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ttacccaccg ttgaccttgg ttgtggtgga tgttgtatgt ttgggatgtt tggcccaact 180

ccaacctcac cctggtgggt gaggagtaga tgctaactat ggcaaagcaa gcgtatatgg 240

aagggaacgg gtgttccaga tccacccagt taaacttgtt gttgtgcaag gagcagtctt 300

catcttgggc gttgcttact cttttaattt 330

<210> 4222
<211> 101
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e06b1

<400> 4222

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ggtgaaatca atggactgtg cgtcgtccaa cgtcgacatg t 101

<210> 4223
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e09b1

<400> 4223

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gcgccgccgt cgtctgcgcg cacggggcct tccgcgtgcc agaggacctg ttcctcgacg 180

aggtgcccga ccagggtctc gtaggaaacg gcgccaccct caacctcctc tccttcatca 240

acggcgctgc tggaggagga ggacgcgtct gagccagcct catgtcctca gctctctgat 300

ctgctacgcg gaagagacaa gtaaagtctg tggctggttg attcgctttt tcagaaacga 360

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tagaagagga tgcattggag ttatact 447

<210> 4224
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e11b1

<400> 4224

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gttgaggatg cgcagggcca ccagtttgcc acccgtctgg gcaacgtgtt caccatcggc 120

aagggcacca agccgtgggt gagcctcccc aagggcaagg gtatcaagct caccatcatt 180

gaggagcaga ggaagcggga tgccgctgcc caggctgctg ccaaggcctg attctgaggc 240

gttgagtcgt tttgctatag ccagttatct tcaaggatat agacctatat cgctagcac 299

<210> 4225
<211> 499
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090e12b1

<400> 4225

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cgggccaaaa gctggtccga ctccgcccac cgcttcttgc agcgctgcgc ggacgccggg 180

aacctcgacg catgctacct tcttggcatg atccggttct actgcctggg gagccggggg 240

tcgggagcgg cgctgatggc ggcagcggcg gtgggtggcc accgggaggc gctctactcg 300

ctggccgtca tccagttcaa cggcagcggt ggcagcaagg acgaccgcga cctccgcgcg 360

ggcgctgcgc tgtgcgcgcg cgcggcgtcg ctcggccacg tcgacgcact ccgcgagctc 420

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ctcattcagg cgaacgcgc 499

<210> 4226
<211> 210
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090f02b1

<400> 4226

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ccacacccgc aagcagcgcg agcaggcgcc gcaaccggag gcgaacgctg cgccggagcc 120

tgccgagaac aagagctccg ccagcggcaa gaacttcagc tcctaccaag cgctgggtgg 180

ccacaagacg agccaccggg tgaagcagcc 210

<210> 4227
<211> 201
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090f03b1

<400> 4227

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tacaaggggt cggccttcca ccgcatcatc ccgggcttca tgtgccaggg cggcgacttc 180

acccgcggca acggcaccgg c 201

<210> 4228
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090f04b1

<400> 4228

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acaccaccac caccaccgag tccttcggcg gaggcgagca ggggcagggg tactacaaga 180

aggaggtgac gcagcacaag aacagggagc gcgtcggcga ggccggcgcc ctcgccgccg 240

gtggcttcgc cctgtatgag gggtatgagg caaagaagga cccagcccac gcgcggaagc 300

accagattga ggccggcctg gcaggggcgg cggctgtcgg agcaagcggc tacgcctacc 360

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ttcacaacag ctacagcaac taagtaatca tgcatgc 457

<210> 4229
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090f05b1

<400> 4229

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aagcctcggc cgcgaggccg ctccggccag ccgtcgacat gcctagcgag gtgctcaagg 120

accaggtgat cgtcaacaag tacgcgccgc ttctgctcgc catgctgccg aggggccccg 180

tgacgccgtc cggccccagc ggcggcacga acgaggccgg gaactggttg agcaagcgca 240

gggtttccct taggataata gatccatcga tctaaagaaa tctttaggca tgcagtggta 300

gacggtatgc tctgttttgc agtacaaaat acttgtacat acatgattgt tagactggga 360

gacttgggca tatagtgtag gatatacccc aaaattatac cttcattctt taatttgtcc 420

cttgaagtaa ttgattgaaa gagttttgtc tt 452

<210> 4230
<211> 493
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090f06b1

<400> 4230

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gagggtcagc aaactcaaga ggaggtacag aagaggaatc tcagggacga acttgaggag 180

cgtgagcgca agcacttctc atccaaggat aagtcctatg ttgatgagag ggaccggcga 240

aaaagttcga gcctgctctt agaaggttca aaacgggatg aggataagat agttccacgt 300

gaaattgatg cagacgactc tgacgtggag ctcaaaagtg atgatgaaag cgatgacgac 360

gacgacgatg atgacactga ggcactcatg gcagagcttg aaaggattaa aaaagaaaga 420

gctgaggaca ggcttagaaa ggagcgtcag caagcagaag aagaggccaa gatgaaggaa 480

gctgagctga tgc 493

<210> 4231
<211> 144
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090f07b1

<400> 4231

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aacgccggga atgcgaacca aaaacttgaa agcaaatgtg acaatcatct atagttcaac 120

tgacaatcgt ttggcttcag actg 144

<210> 4232
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090f11b1

<400> 4232

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ccgcctcgcg gaggagcgca tggcctggcg caagaaccac ccccatggat tcgtcgcgaa 120

gccggagacg gtggccgacg ggtcggtgaa tctcatgatc tggaactgca ccatccccgg 180

aaagcagggg actgattggg aaagtggata ctacccactt actctccact tcagtgagga 240

ctaccctagc aaacctccca agtgcaagtt cccgcagggt tttttccacc caaatgtcta 300

tccttcaggg acgggctgcc tctcgattct taatgaggat agtggttgga gacctgccat 360

cactgttaag cagattctag ttggaataca ggatttgctt gatcaaccta atccagctga 420

tcctgcccag actgatggtt atcacctctt tatccaggat ccagcagagt gcaagagacg 480

<210> 4233
<211> 180
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090g02b1

<400> 4233

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atataccaca cgaacaagtg gtgtatttgt tatcgaaacc ttgtcttcta tatggtccaa 120

aaatatttag caaagaagaa accactacag acagaaaaag cataagacag aagccccacc 180

<210> 4234
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090g05b1

<400> 4234

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tgtgtagaga tatacatcga gatggacaac cctccgagta cgcaggacat gtcctactat 120

gatcatgttc agaagcgcca tgaggagaaa ggctgcttat atgcatgcct gtttacactg 180

tgctgttgct tctgctgcta cgagacctgc gagtgctgca tggagtcctt gtgctgctgc 240

ggctaaattt agctgcacat ttctgctgtt gcatggagat ctggcaggct gggctgtact 300

gtggaaaacc catatcgttt tgccttggtg agctggcgaa taggcatatg tggctgcttg 360

aataaaaact gtagttacgt ctctattgtc atgtatgatg ctggtcgcca aaaataagat 420

agtatgccgc cggtgtgtgt 440

<210> 4235
<211> 446
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090g08b1

<400> 4235

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cctttcatgt taacgttttc gctcatacag ttttctaatc tattgacgct tgtttagttt 120

ctcatgaatt atagttcacg taaacaatac aaacttccta ttgtgctgtt gaattgcttg 180

ttcactttaa ttatcaacaa gtcatctgat tgataccaca ataaactgca tcaagatgag 240

acttttctta actgtctata acgcatggtg tgatgaccat taggaaaact ttggcacagg 300

tggaggccga aggactagtg cttccggatg gaacacttgt ggtagatgga cgacctgttg 360

ctgctgtgta tttcagagct gggtatgcac cgactgatta cccttcagaa gtggaatgga 420

gtgcacggct tttgattgaa caatca 446

<210> 4236
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090g12b1

<400> 4236

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tgttagcccg ctttgttcac agggaaccgt agtttgtacg cccatcggtc gattagccat 120

ggcccccctgc gattctttct caagaaaacc taccacccgt tggccagatc aggagaactc 180

ctgcatgcgc ctgctccgtc agcagccgcc gccgccgccg ccgccgctcc ggcggccgga 240

cctatctcgg tcaggagcta gttatcgaag atttttgaag aatgttaggc tcgtcgccta 300

tggtttgagc ttggtgtggg cctttacgct ataatctgca tggtcaaacc agcatagatg 360

ttcttgcaat ggtcgatgtg gccattcaaa atcctctaat atgaaaagag gaggtcaagt 420

agtttgaggc ggcaatggcc tatttttgta agttttctat 460

<210> 4237
<211> 256
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090h01b1

<400> 4237

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aaggaaacaa caaccagagc caccccaaga gggcgcccca gccgagagga ccacccccaa 120

ccaccccggc aagacggaga ccaacgcggc ggaaagggca aaccaaaacg gaccccaagg 180

ccccccaggc caaacccgcg agacagggaa aaccccgacg tggaccacca caaaccgcga 240

gcagaaccga cccccc 256

<210> 4238
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h03b1

<400> 4238

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gaggcatcaa gggcctgcca ccgctcccgg ggccgatgtg cgtgtaattc ctattaatgt 120

atcttatgtt gccaaacaac aacatgctcc tgtcaatgct atatcattgt gggcgtggca 180

ttttttcttcc tcaggtgata ttccaatata caataagttc catcaagaat tgcatgt 237

<210> 4239
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h05b1

<400> 4239

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acccccttcat gcacgcgcgc ggggtggcct tcatggtgga caactgctcg acgacggcgc 120

ggctggggtc gaggaagtgg gcgccccgct tcgactacat cctgacccag caggcgttcg 180

tgacggtgga caaggacgag cccatcaacc aggacctcat cagcaacttc atgtcggacc 240

ccgtccacgg cgccatcgag gtgtgcgccg agctgaggcc caccgtcgac atctcggtga 300

cggccgacgc cgacttcgtg cgccctgagc tccggcagtc ctcctaggct cctcgccccc 360

ttgcacctaa gttaagtaag ctgcgccggg ccggtcgggg cctggcacga gagttggttt 420

ttgatggatg gacattcatg gactgtaatg tatgtgtgcg actggctgtt tgaactcgtg 480

agctgctgct gggtagag 498

<210> 4240
<211> 180
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h06b1

<400> 4240

gaaggagcga tgagcacgcc ggcgtggccg ccgcgctggg gcgctgctgg catggcggcg 60

gcgtcagcgc cgtcaactac ggtctgagcg tggacaggga cagggtagca aaactgaagt 120

cctactgcac ggtgggagca cggaggccag acccagcggc gcgcgctgca acacggagcg 180

<210> 4241
<211> 274
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316090h08b1

<400> 4241

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acctgccccc ggaggcaaga tagacgtatg gtcatcaaaa ctgatcggct taagaactga 120

ccaggagaca gggcttccgg ctatagctcc aaacgaacgg ctcgtgctgc caggcctaga 180

tgaccaatgc ggaacctaga cgccatacaa agtccgatga ggtacaacgc gtggagaagg 240

ccaaccacga ggaggcccaa ctcaaggagg tcag 274

<210> 4242
<211> 305
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h09b1

<400> 4242

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aaggatggtg agagtcagtg tgctgaacga tgctctcaag agcatgtaca acgctgagaa 120

gcgtgggaag aggcatgtca tgatcaggcc ttcttccaag gtcattatca agttccttat 180

cgtcatgcag aagcatggat acattggcga gtttgagtat gttgatgatc acaggtctgg 240

caagatcgtg gttgaattga atggcaggct gaacaagtgt ggtgtcatca gtcctcgctt 300

tgatg 305

<210> 4243
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h10b1

<400> 4243

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gagcagctcg tcacgccgtg gaccgtctct gtcgcgagtg gttacaattt gttgagggat 120

ccacgctaca acaaggggct tgccttcaca gagaaggagc gcgagacaca ctaccttcgt 180

ggccttctgc caccaaccgt catatcccag gagctgcagg agaggaagat catgcataat 240

attcgccagt accagctacc tctgcagcgt tacatggcta tgatggacct tcaagagggg 300

aatgagaggc ttttctacaa gctcctcatt gacaatgttg aggagctgct tcctattgtg 360

tacactccaa ctgttggtga ggcctgccaa aagtacggat ctatatttag tcgtccgcag 420

ggtctttaca tcagcttgaa agagagggaa aga 453

<210> 4244
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316090h11b1

<400> 4244

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ggtgcatggc atccccacct ctgagataag tgtcgtctcg tacaaccagt gtcccggcgc 120

agagccgatg cctacgcttg tgctatcgct caatggcgat gactgcgcgc tcgtgacgca 180

ggcgctcggc tcgctcaacg ccgtcaatca gaccgctggc ggtgtggttg tgggcgccac 240

gaacaactca gtgacgcgcg ccaagccctc taagaagagt ggcatgccga cttggctaat 300

cgtggggatc gtcctcgccg tcctgctggg catcgccgcg atcgttgtgt tggtggctgt 360

gattgtgaag gccacatctg gcggatcgaa gccctccggc ctggcgcaca ggacgcactg 420

ggcgacggag gagctttac 439

<210> 4245
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a04b1

<400> 4245

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cgtggtgcat ggagggccac tacatgacct gcaagatcgc cgacggtttc ctgacgagcg 120

aggcgttgac ggtggtgaag gccctcctgc cgtaaagatc caacggcgag ctcgcggagg 180

tgtgctcgtg ggcagacaga cagcgcttcc ggtaccggtg gtacagacga ctacactggg 240

ccgacacccc gggagactgc aagttcagct acgccaggga ctgccacgac accaagggga 300

acaagaacgt gtgcgtggtc ggggctatca acaactacac ggacgcgctg caggactcgt 360

ccagcccatt tgacccgacg gagagcctga tgttcct 397

<210> 4246
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a05b1

<400> 4246

cccacgtgtc cgctttcccc ttccctccct ccctctcccg gcgggccgac agaggcaatt 60

tcgccctcga ttcgaccccg attcgtccgc ccgcgaccgg gattccctac ggcaagcgcg 120

gatctgaacg ctgcgctccg tgtcgccgct cgaatccgcc atgaaggggg ccaaatccaa 180

gggcgccgcc aaggccgatg ccaagctggc ggtgaagagc aaggggcgcg agaagcccgc 240

caagggcagg aaagggaagg ccggcaagga ccccaacaag cctaagaggg ctcccagcgc 300

tt 302

<210> 4247
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a06b1

<400> 4247

atctcttata ccaaagctca tattcttctg cttgaaatgt ttttgggacc acagatttgg 60

aggatgtctt gcaactgcag atcaggctgc agctgcggct cagactgcac gcgcgggagg 120

atgtaccctg atctgacaga acagggca 148

<210> 4248
<211> 152
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091a12b1

<400> 4248

tccacgcgtc cggtacaatt gtactgtact gtatatgtaa gagagtgatg atgttggctt 60

attctttgtc gcgagactat caggtataat tggctatgta tgaagaccac ccatgggcat 120

atcttctagg aacaaagacg gacgagttct tc 152

<210> 4249
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091b08b1

<400> 4249

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ccgccgttgc gacgggagga gcacgaaaaa cggcagcccc gactgccgtt gcaagcttcg 180

gccatgacgc ggtggcgcgg cgcggtgcag cagcttggat gcgtcgttag ctccccgccg 240

acgtcgacgg cctgcaaact tctggtccag gtgtaagagg ttggtcctcg agctgcgtgg 300

taagggtagt gctcgccaac gcggtcagtg cggcactacg gcgaccagca cgggtgcatg 360

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ggtcgggcgg cgcaactttt ttttggt 447

<210> 4250
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091b09b1

<400> 4250

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gcgcccgtcg atcaggggaa gaaggaggag gaggagttca gcacggggcc gctgtccatt 180

ctcatgctca gcgtcaagaa caacacccag gtgcttatca actgcaggaa caacaagaag 240

ttgcttggtc gcgtgagggc atttgatcgt cattgcaaca tggttcttga gaatgtcagg 300

gagatgtgga ctgaggttcc aaagactggt aaaggcaaga agaaggctct cccggtgaac 360

aaggacaggt tcataagcaa gatgttcctc cgcggggatt cggtcatcat tggcctcagg 420

aacccgaaat gagtttgacg actcggcgta aaccagaaga gtctcttttc gctatgct 478

<210> 4251
<211> 96
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091b10b1

<400> 4251

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actttagaat aatttggtaa taaagggcgg ttatat 96

<210> 4252
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091b11b1

<400> 4252

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<210> 4253
<211> 97
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091b12b1

<400> 4253

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cgtaagggaa atctgaaaaa gcaactttat tgttttg 97

<210> 4254
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c03b1

<400> 4254

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gagagagaaa tcggtggaga tggccgggag gctgactgcg atgggatccc gcatcatggg 120

cggccacggc gcagccgcgc gcgccgtggc ctccgccctc cgcaaccgcg ccggcatggg 180

cctccccgcc ggcaggcaca tcgtccccga caagcccctg cctgtgaacg acgagctggt 240

gtgggacaat ggcacaccct tccctgagcc ctgcgtcgac cgcctggcgc cgcacatcgg 300

caagtacgag gctctggcgt ggctgtgtgg aggtctgagc tttttcgccg ctcttggcct 360

ggccgccgtt gtgaatgaca aggccttcaa gatgccatat tcaccaaaag tctacccgtt 420

cgacaatttg agagcgggac cttggtgata gatcataaaa atattttccc ccacctttt 480

<210> 4255
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c05b1

<400> 4255

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tgtccttaca aaggagtcga caacaattgt tggtgatggc agcacccagg aagaagtgac 180

taagagggtt gcacagatca aaaatctcat tgaggcagca gaacaagact acgagaagga 240

aaaactcaac gagaggattg caaagctcgc cggtggtgtt gctgttattc aggtgggagc 300

acaaacagaa actgaactta aggagaagaa gttgagagtt gaggatgctc taaacgcaac 360

caaggctgct gttgaggaag ggatttgtgt tggtggaagg gtgcactctt ttgaggcttg 420

ctgctaaagt tgatgccatc aaggacaccc 450

<210> 4256
<211> 459
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316091c06b1

<400> 4256

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tgtggagcac gctgctgcta cctggtcgcg ctctcagcag tgtgaatttc cagaagcatg 120

cttgccgtgc cttcttccgg gtgcaccgga ggccggcatg tgagcagggg tgcttcagtg 180

atgcagaaga aaaaaggcaa gtcttattgg caagggaagg ctacgccttt cttccaggtc 240

tccctctctc catctaaatc cgtgtttgga ggaggggggct acggttagtt tacccaccgg 300

tttaccgtgt ccttgtgagt tgtggtcatt atcatgcact cgtcagttgc ttgtcatgta 360

tgggggcctt gaattttcag ctacataatg gtcggntgtg tcagtgaatg ggaagtgtgt 420

tcatgtgagt caattagctt aaagaagtgt gatgtgtgg 459

<210> 4257
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c08b1

<400> 4257

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catccattct caaggttagc aggagaccgg ccatggcgcc gtcgcagccc aagtcagggc 120

tcttcgtggg catcaacaag ggccacgtcg tcaccaagcg cgagctgccg ccacgcccgt 180

ccgaccggaa ggggaaaggt accaagaggg tgctgtttgt ccggaacttg attagggagg 240

ttgctggatt tgctccctat gagaagcgta tcactgagct tcttaaggtt ggaaaggaca 300

agcgtgcact caaggtcgcc aagaggaagc ttggtactca caagagagca aagaagaaga 360

gggaggagat gtcaagtgtc ctcaagaaga tgaggtctgg tggtgttggt gctgccgaca 420

agaagaaata gattttgcat 440

<210> 4258
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c09b1

<400> 4258

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acaaacgccg ccacacaagg ccaggacctc gagagaacca gcgccaccga cgagtggcaa 120

ccagccgact gaaaaggggc gggccaggag ggagaggcct agggctcgcc ccaatggcct 180

gacgcagcaa aggaagcagg aaaaaaagga agctgttgat ctggaagaca cagataactc 240

tggaaccatt gatgcaaaag agcccacggt tgccatgaga gcccagggat ctgagatgac 300

tgaagagcat attaggcaaa agaaggctga tggggaccaa catggcagtg gagcgaacga 360

ctaccaggag gttgagccca cgacgactgg ccaa 394

<210> 4259
<211> 69
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c10b1

<400> 4259

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ctagatcgc 69

<210> 4260
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091c12b1

<400> 4260

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gagggtgtgg tgtacggtgc aggcattggc ccgggtgtgt acgacatcca ctcccccagg 180

atcccgtcca aggaggagat tgccgaccgt gtcaacaaga tgctcgcggt gctcgacacc 240

aacatcctgt gggtgaaccc tgactgcggt ctcaagaccc gcaagtacgc cgaggtcaag 300

cctgcgctca ccaacatggt tgaggccgcc aagcagatcc gcgccgagct cgccaaggcg 360

cagtaagccg tgcttgtata gcagctcccc aatttt 396

<210> 4261
<211> 101
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091d02b1

<400> 4261

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 101

<210> 4262
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091d03b1

<400> 4262

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gcggtgcaca ccatcggcaa gagccccagc tgcctgtgcg ccgtcatgct gtccggcacc 120

gccaagatgg ccgggatcaa gcccgaggtc gccatcacca tccccaagcg ctgcaacatg 180

gccgaccgcc ccgtcggcta caagtgcgga gattacacgc tgccttgatg gcccggcaat 240

gctgccgatg aagatgaatg ctgtggaagg cgtcgtcgtg tgggaataag cgagtggtgc 300

atgtgccact tatgtggggc actagtgact tcatggaggt gccatcatgt gatgggtgct 360

tgggggaata tgtttctata agcatgtaat gtttcgtctg ggttaacgtc aacaaacgtc 420

tccgtgtgga ttctattttc 440

<210> 4263
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091e02b1

<400> 4263

ggttttggct tctcctcccc ttccggctcg ggttctggtt cggttcgggt ccgagagtag 60

ctagcctaga ctagggtttc cgaagatcgg agaggagaga aagggagaga tccatggcgg 120

agacggagta ccggtgcttc gtgggcggac tcgtctgggc caccgacgac cacaacctcc 180

agcaggcctt cagccagtac ggagagatcc ttgacgccaa gatcaatgaa cgaccgtgag 240

accggcaggt cccgcggctt cggttttcgc acgttcggca gcgaggagtc ggatgcgcca 300

ggc 303

<210> 4264
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091e07b1

<400> 4264

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<210> 4265
<211> 478
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316091e12b1

<400> 4265

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catatggccg tcctttctca gtccggtcgg tgcccagagc taatatatga cggggaacta 120

catccggggc gattgcaaca gattctgtgc tgtatgtagg ccggataaca aggacagaga 180

agtccaataa tacctgtagt tttcccttgg atcgcagagg cactttgttt tgctaatgga 240

aatgatcaat agaatacaat tttttgtgtt tttgtgagct gtggctcaca ctgccagcat 300

tggttgatgc gcttagtttt cggaaattgg tttccgttat tcatcagtta ttgtaagttc 360

atgacttcag ttcttttctt ttgaagattg catgtaccaa actttgccaa agaacctnct 420

aatatattat gacactggat ttggtgacac tgttcttttt tgaaattagg cacaggtt 478

<210> 4266
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091f03b1

<400> 4266

cccacttttc cggccgacgc cgccgaccct cgcgacgccg ccacttctcc tcggggcgca 60

accatggtga cctccaccaa gaagacgaag aagtcggggg acaacatcaa caacaagctg 120

cagcttgtca tgaagagcgg caagtacacg ctcggctaca agaccgtcct caggaccctc 180

aggaactcca aggcaaagct tgtgatcctt gctaacaact gccctccgct ccgcaagtct 240

gagattgagt actatgctat gttggcgaag atcactgtcc accactacca tggaaacaat 300

gttgatttgg gaactgcgtg tggtaaatac ttccgagtct gctgcctgag tatcatcgac 360

cctggcgatt ccgacatcat caacgcaaca ccagctg 397

<210> 4267
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091f09b1

<400> 4267

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aagcatttct gggagggtga tgaagaggag gtgaaggcga agaagaccca gctgttcggt 120

gccaacccac cgatcctcta cgtcctccac tacctgggcc gcaagccatg gctatgcttc 180

cgggactatg actgcaactg gaacgttccg atactgcggg agtttgccag tgacatcgcg 240

cacacccggt ggtggaaggt gcatgacaag atgcccaaga agctccagag ctactgcctc 300

ctgaggtcga ggctgaaggc agggctggag tgggagcgga ggcaggcgga gaaagccaac 360

ttcaccgacg ggcactggaa gcggaacatc accgacaaga ggctcaagat ttgcttcgag 420

aagttctgct tctgggagag catgctgggg cactggggcg agggccccaa caacgcgacg 480

<210> 4268
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091g03b1

<400> 4268

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cccgggctca acaagatctt cgacaaggat ggcaagaagg ccgccgccgc cgagttcttg 180

aaatccttca acaaggagga gattgacaag gagattgagg acaagaagac agaactagag 240

cccaaggttg tggagaccat tgaagcatct cctccagaaa ttaagggctt gatgaaggat 300

aagaaaacat ccaagatcaa gaagaactca gttgccgtca ccaagttcct tgacgatttg 360

gccaagattg atttccccgg agccaagctg gtgag 395

<210> 4269
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091g05b1

<400> 4269

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ggcggcggcg gaaagcgaga gctccagcgg gccgtcggga gggaaccacc ctcgtcgtcg 120

gagatgacgg gcaaggcgaa gccgaagaag cacacggcca aggagatcgc ggctaagatc 180

gacgcggcga cgaccaaccg cggcgggggc aaggccgggc agaaggaccg gctcgggcag 240

gagaagggcg gccacgccaa gatggagtgc ccgctctgca aggtgacggc ccccgacgtc 300

aagtcgatgc agatccacca cgaggcgcgc caccccaagc tccccttcga ccccgagaag 360

atcaacaacc tgcacg 376

<210> 4270
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091g07b1

<400> 4270

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aggatgtcgt agaagatgtg cgccaacaag cgcgccccgg acccggtcat ggcccacgag 120

ttcacactcg agttcaccat gcacctccat aggtgcatct ttgggtgcac cttaccgaat 180

gccgtcccgg atatcatgaa ggttgtccag aaggtcgtgc agaccgacat tgtaaccatt 240

gatgtgcagc ttgacgtgca catctacaag cacatcttga gcagtgtcct caggagagtc 300

ccgagtagga ttcgtctcaa ga 322

<210> 4271
<211> 293
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091g11b1

<400> 4271

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tttcggcaag ctgtaccgca cccctaatta ggttccatat atacaacctg agtttatgtg 180

tctatgaata gcgaagtcgt agactttgca taggaaatga ctgtcgggtc ctgaaaagat 240

ttaccttata atactgagat gatattgtcg aatcttttgc aaggtgtttg tct 293

<210> 4272
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091h01b1

<400> 4272

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tggggtgctt ccaagctcat gccagttgga tatggcatca agaagctcca gattatgatg 120

accatcattg atgacctcgt ctctgtcgac actcttattg aagaccatct ctgcgttgaa 180

ccagccaacg agtacatcca gagctgtgac attgttgcct tcaacaaaat ctaaatcttc 240

ctgaggcaag tgatggcggt gggtggacaa tgcagcagca caatatatct acagttttcc 300

gttgccgtga tggtgtcgta gctaaagcaa gcataacata tctgccctgt gaggtttttg 360

gaccttaagt cgagttgagt cggagtggta ttactgaggg gtatttgctt cgtatgaaat 420

gagacaatgt ggttggattt ctcgtgctat tctttttctc tgg 463

<210> 4273
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091h05b1

<400> 4273

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tgtgcagttt gttcgttata tgtggatatg ataatggaaa ttgcaagatt taaaccctaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aataaaaaaa aaaaaaaaaa 300

aaaggggggg gccccttta agggtccaag tttttctccg gcggttggga aaaaaaattt 360

ttttttttg ggcccc 376

<210> 4274
<211> 190
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091h07b1

<400> 4274

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catagaggca tggcatttta cattggcaaa gactgaactc ctatatgtag cttaagcttg 120

tatcactagg cttgtaatct gtattatcga ctgtaagata cagttaatta aatcatattt 180

cagtatttcc 190

<210> 4275
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091h09b1

<400> 4275

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tcaactatgt ttaaggattt ccacagaaga ttacagcggg acctgaaaaa gattgtggat 120

gtacgggtcc gtgcatctaa tgctcgactt ggtggagatg cgaaggctca acccgtggaa 180

gtaaacgtgg ttagccatcc aattcaaaga tatgcggttt ggtttggcgg atcggtgctt 240

gcttctacag cagaattcta tgaggcttgc cacacaaaag cagagtatga agagtacggt 300

gcaagcatct gccgatcaaa tgctggtttc aaagggatgg attgaaattt tcgtatgaag 360

actaggaggc atcacagata gcattttcat gcaatcagcc tgagcct 407

<210> 4276
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316091h12b1

<400> 4276

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accggagctt cagcattacg cgcccggcgt gccggttgtg ctggtaggca caaaactgga 120

tcttcgtgaa gacaagcact atttgctgga ccaccctggc atgatacccg ttaccacagc 180

acaggggggag gaacttcgta agcaagttgg tgctttatat tacatagagt gcagctcaaa 240

gacacaacag aatgtcaaag ctgtgtttga tgctgctatc aaggtagtaa tccagccccc 300

aact 304

<210> 4277
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092a01b1

<400> 4277

gaatctatta ggtgtcgtcg gacgatcggc cagccgcctt ccacatctgc tctggcatcg 60

catcttggac tagctatagc ttagcctgct gctactaatc gactttctgt cacatgttta 120

tcgttgagca attcgaaaac ataaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaagaaa aacaaaacag aaaaaaaagg ctgaccgcta tcaaaggaac caacgctaac 240

atact 245

<210> 4278
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092a03b1

<400> 4278

ttggagagcg agctaggccg agacgatgag ctccccagcg gcggccgtga aggtgatcgg 60

cgcagtggac agcccgttca gccaccgcgc cgagatcgct ctgcgcctga aaggagtccc 120

ttacgagctc atcccagaag acctgagaaa caaaagcgag ctgcttctgg ccaacaaccc 180

cgtccacaag aaggttccgg tgctcctcca gggcgaccgc gccgtctgcg agtccctcct 240

tatcgtcgag tacgtcgacg aggccttccc tggcccaccc ctcctccccg ccgaccccta 300

cgagagggcc atggcccgct tttgggccag cttcatcgac ggcaagtgct cgaaggccta 360

ctggctggcg ctgtgggcgg agggcgaggc gcatgaaggg tttgtgaagg agacaaagga 420

gaacttcgcg ctgctggagg cgcagctgga agggatgcgg ttcttcggcg gcgacgccat 480

cggtc 485

<210> 4279
<211> 90
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092a07b1

<400> 4279

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atataaagcg gggcgaaagc ctttttcggt 90

<210> 4280
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092a09b1

<400> 4280

tggctaaact tcaatatgaa taataaagtc caaggtttaa ttccaaaaaa aacatgcatc 60

aaaccagtac ttagtactta ctactggctt aatttacgat gtggtgtagt tactagtaag 120

tcgtgtacca ccagcaagtg tgtttgtgga tcgaggagga gtacgtagta ctacgtgcta 180

cctcccggcc ggtcgtgtag aataaacggt ggctaaactt caatatgaat aataaagtcc 240

aaggtttaat tccaaggaat aagatggcaa aaaaaaaaaa cccgaacaac tccaaagaga 300

gggccatggc ccgattttga aca 323

<210> 4281
<211> 61
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b03b1

<400> 4281

ttccacgcgt ccgcccacgc gtccgcccac gcgtccgccc acgcgtccgg ttctagatcg 60

c 61

<210> 4282
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b07b1

<400> 4282

ggcctctctc tgtttgctct cgcgtccgcc gcgcccatcc tcgtccgcgc ctgcgccccg 60

accgtgctcg ccgcctcccg cccgatccac cggtccacca ccgcgccggc ggcatggcgg 120

atcagctcac cgacgaccag atcgccgagt tcaaggaggc cttcagcctc ttcgacaagg 180

acggagatgg ttgcatcacc accaaggagc tgggaacagt catgcgttcg ctggggcaga 240

acccaacgga ggctgagctc caggacatga tcaatgaagt cgacgctgat ggcaatggca 300

ccattgactt cccagagttc ctcaacctga tggcccgcaa gatgaaggac accgactcag 360

aggaggagct caaggaggcc ttcagggtgt tcgacaagga ccaaaacggc ttcatctctg 420

ctgctgagct ccgccacgtc atgacgaacc tcggcgagaa gctcaccg 468

<210> 4283
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b09b1

<400> 4283

gagatccgat ccgatccgat ccgccggaac cctagccagg tccaccacca tggcggcgac 60

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cgacgcgccc ttcctcgtcg cgcacaagaa ggtggccctc tcccgcccca agcccggcgt 180

cgagcgcctc gccgtctccc tcgacctcta caaccaggga tccgcaactg catatgatgt 240

ggccattaat gatgactcgt ggccaaagga agcatttgaa cttgtctctg gagaggtctc 300

aaagactttg gaaaggcttg aacctggtgc cactgcttcg cacgcgtttg tattggagag 360

caaaacacag ggcaggttcc aagcttcacc tgctgttatc aagtaccgtg ttgccacaaa 420

ggctgcactt caagaggcct actcaactcc catcctcccc ctggacat 468

<210> 4284
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b11b1

<400> 4284

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caaaggccac ggagtgtggc acttcgacca gatgctgctt gaggaggcag cttgaaggac 120

acggacacga cgactacggg caatggagga tgtaggtgtg atatgtcaag tagtggacag 180

ataagccaac cactggatgt ggttttgagg gatttttgca gtggggtttg tagggtgcta 240

tgccgcgctg ggtttgggat ttgaaataaa acgaaggaga tgtgccacgc tcttaaaaaa 300

aaaaaaaaaa aaaggagaac aaactaaagg aaccaaactt acaaaca 347

<210> 4285
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092b12b1

<400> 4285

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tgaggctgag ggagctgggg ttggagttca ctccgctgag gcaaagcttg tacgagacag 120

tgacgtgctt gcagaaaaag ggtcacctgc gtctccccat tgttcccata gcacagaagc 180

gcgcgtactt gtaacagggc aggacagggg acaagcccat ctcataaaac aacaagagca 240

aagctgcagc agcaaaagaa aatactgtca ggattttgga gcttcagcat aaaattaatt 300

gcgtatttct acaaagcaaa gtgtggcatg taaatagaac taaaaccacg acgagtattt 360

tggaagggag gggcattatt tattttgtaa tgaatgtact tctacacatt atttataaat 420

tcttct 426

<210> 4286
<211> 65
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316092c03b1

<400> 4286

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taaaa 65

<210> 4287

<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092c07b1

<400> 4287

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ctgcagaagc tgctcgcccg gaaggccgtc ttcgtcgacg acgacgtctt ctccaaggcc 180

tccctcgcct ccgaacaggc ccgctccatc aagattcttg accagagggt gcagtctctg 240

gaacgtgaac tggacgctgc catttctgca gctgctcgag cccgtacaga aaaacgccag 300

gctgaagctg ctcaacgggc tgcagagctg cgtgcacagg aagtcacgaa ggagctggag 360

aacaccgcaa gagttttcca gctgcacatg gaagagctgc gggcaaaaca agaggagatc 420

gccaagagag atagtgatat aaggtgttgg aagcaataat acgaaccctg agtagcaaag 480

a 481

<210> 4288
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092c08b1

<400> 4288

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tcgcgtccat tccactgcct atatttgctg gcatgtactg tgttttcttc gcatatgtcg 120

gtgcctgtgg tctgagcttc ctccagttct gcaacttgaa cagcttcagg accaagttca 180

tcctgggctt ctccttcttc atcggcatat cagttcctca gtacttcaac gagtacgcct 240

ccgtctcggg ccatggcccg gtgcacacgg gcgcaagatg gttcaacgac atgatcaacg 300

tgcccttctc gaacaagccg ttcgtggcgg tgctggtggc ctacttcctg gacaacacga 360

tgcacctgca ccagagcgcg gtgaggaagg acaggggcta ccactggtgg gacaagttca 420

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<210> 4289

<211> 481
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316092d01b1

<400> 4289

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tgtcatggga acgcatggtt atgcggctcc agaatacatc atgacgggcc acttgactac 120

caagagcgat gtatatagct ttggtgtagt gctcttggag ctcatctccg ggctacggtc 180

tgtggaccgt gcacgacggc cgagggagca gaacctgatg gcttgggcta gaccatatct 240

caagtgctct gacagattgt acaaagtcat ggacccatcg cttgagtgtc aatactcatg 300

caaaggcgcc gaagcggcat cactggtggc atacanagtg tctcagccag aacccaaagt 360

ctaggcccac catggggagg gtggtcaagg ccctcgagcc cgtcctcagc atggaagact 420

tctttcatat gggcccattt gtgttcacgg tcattgtcga ggaggacaag gtagtggaca 480

t 481

<210> 4290
<211> 82
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092d02b1

<400> 4290

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aagtgtttct ctttttacta gt 82

<210> 4291
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092d09b1

<400> 4291

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gttgtcgcca aagtcatgag ctaataacaa taatatgttc cagacctttc tctttttttt 180

tggcgtagtg aattttagcg aacaaatgaa tgttgatatg aaggatttgt ccgaccggaa 240

acacgagata aacgagagtc gagagcaagg ggactggcat ggatgcatct tgtgtggatg 300

cattcagcca accaacttcc tacggataat ggtttgttac cattcccaag aattgctatt 360

ttttcttctc atgttgggta gtttgctgta tcataccgca gcttgttacc tagacacgct 420

tctctggcat atattagctc ggtgattcaa taagaccgtc tcgtttcctg atgc 474

<210> 4292
<211> 265
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092d11b1

<400> 4292

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ttttgattgg ccccttttgg ggtttgggtg gtatggtatg agaggggaga gcacgtgtgc 120

aagagcgccg taattgtgta attatgcaag gcaatcgatg taaagtatta ctccaaagtg 180

tgaaggaaat ccgatcatgt gtattattca aaaattttag aaagttggga aataagcaaa 240

aaggcccgaa aagaaaagaa ctttc 265

<210> 4293
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092e07b1

<400> 4293

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ggcagtggta gaaaatggca tggatttgga tgaggcaaag gtggaaaaga agaggaagaa 120

gatgaaggca aagagggctg cattagttga aggtggggag gagggtgagg tcaatgctct 180

gacgcatgag aagaaggtga agactgacag gaacaagaag gagaaaaaag aatagaagaa 240

gaaaaataag gttgaggata gtgatggagg ggatagcagt gagcagagta tagatgccac 300

atcagaggac cagcagatgg gcgatgacac tgatgccatt acatttgatg aggctttgat 360

gtccaatctt caaaagcagt ttgagaaggc tggtgcagaa gccgggatgc tcgtgacacc 420

agttact 427

<210> 4294
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092e08b1

<400> 4294

cccacgcgtc cgaccgacca cgacggcgcc gtcgtgcacc acgagcgcaa gaggtccacc 60

gagctgatca ctcagcagta accccgagta atctacgccg tacgttcgta cacatgtcgt 120

gtgcttgtgt tgagtgtggc cggtccaacc gtcctggacg tgaatctcta gattctggac 180

acgttggtca gatttccagg ctttaggacg tagggaccga cacccatggc tctacgggga 240

gaaagatcac atgatattcc gcacgcgtga tgaatccatg tagaaagggt cggttcaccg 300

gccgcttgcg ctgcttgccg tggcgcgcac tgcgcagctt gtgacagatc ttttcaccga 360

ggtgacagtg atactgtacg agtgtgtatg gg 392

<210> 4295
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092f09b1

<400> 4295

tctgtgattg aggtctatcc ataaggttgt gctcccaaag taagatgctt atatatgttg 60

tggattgttg tgtgctcgct ctaaggatgc aaaaataaag gagtgccttg tcattttcca 120

aacaaaagtc ctgggtagat catagaatag caaggcggtt atgccttgtt acctttgat 180

acccgtggaa ctttcttttg gaaaaaatag tatgcagata gagtgcttat catatatgta 240

ctgtgtacaa tatcatacac cataatatca agtcatgtat ttgttaccg 289

<210> 4296
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092f10b1

<400> 4296

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ggcggaccag ctcaccgacg accagatcgc cgagttcaag gaggccttca gcctcttcga 120

caaggacgga gacggctgca tcaccaccaa ggagcttgga actgtgatgc gctcgctggg 180

gcagaacccc actgaggcag agcttcagga tatgatcaat gaagtggatg ctgatggcaa 240

tggaacgatt gactttcctg agttcctcaa cctgatggcg cgtaagatga aggacactga 300

ttccgaggag gagcttaagg aggctttccg cgtgtttgac aaggaccaga atggtttcat 360

ctcggcagct gaactccgcc atgtcatgac caaccttggt gagaagctga cagacgagga 420

ggtggatgag atgatccgtg aggctgatgt cgatggtgac ggccagatca attacg 476

<210> 4297
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092f11b1

<400> 4297

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ccatgtcagg gaacccagtg gccggcgcgc cgggtgccgt cgagccgtat gtgccgcagg 120

cgacctacaa cttcagcgcc cgcctcgcgc tcaccgtctc tttggtcctc ctgatgatca 180

ccgtcgtcgt cgtcgtcatc cctctcatgg tttacctgat gatcactcgc tcacgcagaa 240

gcggcggcca cggcctcgcc ggcggcatcc tccggtccgt tggcatgatc ggcagccggc 300

ggcacgggtt ggacgcgtcc gctctctcgg cgctgccggt cacccgcgta ccggaaggag 360

agcggcgcag ccgcgagggc tgagtgcgct gtgtgcctgg ccgagctcgc cgacggagac 420

caggctcggg agctgcccaa ctgcggccac ctgttccact tggagtgcgt cg 472

<210> 4298
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g01b1

<400> 4298

ggaaagagtc gaaaattcca agacatgtac gatgtggaaa aatttaagat gaacttggat 60

ggtgttgtca aagtagtaga taaacttcct gctgaattga ccactaagaa gccagccgtt 120

attagagtac caaacagggt gacagaagac ttcatcctgg acaccatcca gcccgccttc 180

caaaagaaca gtttcctacg acttgcaatt attttctctt cagtaagttt gaaaccgaaa 240

gggacgaata acaaggactt ggattcaact gcttgccatg caatgttcac tgggctcaaa 300

ctgaacgctg aatattcaga agtggctgaa cagatgctgg gcaggcttaa agagctaagc 360

aagaaatcgg atggcaaggt gctggcggtc gatatgcgga ccgacttgct agagaagaag 420

a 421

<210> 4299
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g02b1

<400> 4299

tttttgacac attgatgaat aaaacaataa aaaaaaaaaa aaaaaataaa aagaa 55

<210> 4300
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g10b1

<400> 4300

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gagacggcgg gcttcttcca ggtggtgggc cacggcgtgc cggaggcggc cacggcggcg 180

atgctcgcgg cggtgcgcgg cttcttcgag cagcccgtgg aggccaaggc gccgttctac 240

acccgcgacc tcggccggcg cgtccggtac cagagcaacc tcaacctgtt caagtcgcgg 300

gcggccaact ggcgcgacac gctcttcatg gagctgccgg cgccggagga gatcccggcg 360

gcgtgcagga gcgccgcgcc ggagtacgcg cggctggtgc agcaggggct gggccgcacg 420

ctgctggggc tgctgtcgga ggcgc 445

<210> 4301
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g11b1

<400> 4301

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atagcaggag ggctttcgat gagggaggtt cttcgtatga caacataagg ctattaattc 120

aagaaatgga aatcaagacg aatgcatgtc gttcagtggt tgatacagat ggtaataagc 180

tctcttttt ggtgtaaaca taaagtaaaa gagcctatag cgtatttatc attataaagg 240

atttctttta caaacaaccg gtagcttgta tcaggatcac tgtctattct gttgcgcaga 300

tttcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaattaca aacacgtgca agcaaaaaaa 360

aaaaacaaat atagagtccc c 381

<210> 4302
<211> 314
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092g12b1

<400> 4302

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaggggggg ggccttttta agggaccaaa gttaacgacc gcgtgattgc aacgaaaaag 180

ttttttttg gggcacctaa aataaaatta atgggccgcg ttttaaaaac gtgggaattg 240

gaaaaacctt gggtttccca aattaaatcc ttttgaaaaa aatccctttt tgccaagttg 300

gctaaaaaac aaaa 314

<210> 4303
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092h01b1

<400> 4303

gttacgacac ccctccccca aatggtgaga gcctagagat gtgtgcagac agagccgttt 60

cctatttcaa agatcaggtt gttccacatc tcacggctgg aaagcatgtg atggttgctg 120

cacatgcaaa ctcacttcga tcaatcataa tgcatctaga caaattgact tcccaggagg 180

taatcagcct cgagttgtca acaggcattc ctatgctcta catatttaag gaaggcgagt 240

ttattagacg ggggagcccg gtaggacctt ctgaagcaag tgtttatgct tatacaaggg 300

taagggtcta ttccattttc tatccctcga cagaacaatt tgtatccaca gtatatatta 360

aaacaaactg attgacacca ataaaggcat ataactgctc tagtggctgg atctgaataa 420

tctcat 426

<210> 4304
<211> 63
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092h02b1

<400> 4304

cgacgcgacg cgcccggcca cgcgttctag cacgcgtgcg gccacgcgtg cggatctaga 60

tcg 63

<210> 4305
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092h05b1

<400> 4305

cccacgcgtc cggccattct atccctgttg gtggtcttgc ttactatgta actgcaccat 60

caagtatggc tgatattctg gcgaatccat tccatgcatt gttctatgtg gtcttcatgc 120

tgtcagcatg tgctctcttc tcaaaaacat ggattgaagt ctctggttca tcagccaagg 180

atgttgcgaa gcagctgaag gaacaacaaa tggtgatgcc aggccatcgt gagtcaaacc 240

tgcagaagga actgaacaga tacatcccta ctgccgctgc atttggtgca gtgtgcatcg 300

gcgcattgac tgttctcgct gatttcatgg gcgcaattgg ttcaggaacc ggtattctgt 360

tggctgttac catcatatac cagtactttg agaccttcga gaaggagagg gcgacagagc 420

ttggtttctt cgggttttga ttgatacatg atagctttgg gagcatgtta tggctacagc 480

acagc 485

<210> 4306
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092h09b1

<400> 4306

aaggactcca acaggcagtc caagcagctg gaagaactca ctgggaagat gagggagtgc 60

aagcgcttaa tcaaggaatt tgatcgtgta ctcaaagatg aggagaaaag caatacttct 120

gaggtcaaca aacagctaaa tgacaagaag caattcatga tcaaggagtt gaattcttat 180

gtcaccatga ggaagacgta ccaaagtagc cttggtaata agaggatcga actattcgat 240

gctggtaatg accaggtagc tgaagataac gttcaaatgg catcagaaat gtcaaatcaa 300

caactgattg attctggaat gaaacaaatg gaccaaacag accaagctat tgagcgttcg 360

aaaatggttg ttgcacaaac tgttgatgtt ggagctcaaa ctgctacaac tctaacacag 420

caaactgacc aaatgaagag aattggcaat gagctagatt ccgttcactt ctcattgaag 480

aaagcta 487

<210> 4307
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316092h12b1

<400> 4307

cccacgcgtc cgagacgaac acgagcacca aggcgatggc gactgctctc aaccgcggcc 60

tccgctccgg gatccgcctc ctcgccaccg gcgccgaggc ctccaagcca gcttcacgtg 120

gattccatgc taccggcgtg aagaggatgt cagggcacgg ccatgatgag ccatactacc 180

tccacgccaa gcacatgtac aacttgcaca ggatgaagca tcagaagctg actgcatgga 240

cttcggtgct gggagccgta agcattggta tcggtgtccc ggtcttcgcg ggtcgtcttc 300

cagcaaaaga agacctcctc cggatgagct cacataccct cccagggcct acttattgga 360

cctattttga atttagcatt ttgtgaaagc caaagctgtc acttcac 407

<210> 4308
<211> 421
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093a01b1

<400> 4308

tgtagctcca tgctagagcg actgacatac aagcgcggca gtctgccgaa gacgcgggct 60

cgcgggctgc tcggcccacc agaatgaggc aagcccaaca gcagggtcca caggccagag 120

tgggtgtagc cggggagcca ccccagcgac tacttagtcg tccacacacg caagagaagg 180

ggatccagtg gatcaatgaa cccggcgtcg gcggctccct gttctttctt atccccaatt 240

ccccttttctc caattcttgt atccccggct tgtaatcgat actagcatgc ccgcgcggca 300

gcacgccgcg tcccatcgat acattatgtg tatgtatgct attttttttcg tgtgatgaat 360

ttaggcctga gagttctatg agcataaatt tttagtacaa aaaggcaaat tgtgcccnnn 420

a 421

<210> 4309
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093a04b1

<400> 4309

cccacgcgtc cgcgagttca aggagtggct ccggcgggtc gacgtggacc gcgacgggcg 60

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caagagcaag cgcggcatcg agtacgccga cgccgacggc gacggctacg tcgacgacgg 180

cgaggtggac ggactcatcg agtacgcgca gaatagcctc gggctcagga tcgtcgccta 240

ctatagagga gtcaatgtag gtctatcaag cgaagctagc tccatgcatg ctacctgcta 300

gaataagctc tgatctatcg tttgccaccc tgtacctttg ctttcttgtc tacttattag 360

ctaatctgtg caccgacgtg tgcgtttgtg atctatcatg atgtatttgg agc 413

<210> 4310
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093a08b1

<400> 4310

cttttccctc gtaaagagct tttagctact tgagagaggt aaactttaag cagccagaga 60

tagcaggata cgggtaagtt atttatgaga tggcggtgcc ggttggagtt ttgcccgcac 120

actctgtaaa gaaacacagt tgcatcaggg ccttgtacgc atgagtgctg ttgtttaaaa 180

aaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aagggcgtgg agactagagg cctaaggttg aaactggccg 300

acagtataca aacaaactta aattataagg ggccggcgtt tcaaaagtta aacttttttt 360

cccc 364

<210> 4311
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093a09b1

<400> 4311

tttatcgata tgttgggttt ttgtagatag cttatcaata cattggaaaa tgactaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggggcg ccttttaaaa 180

aaaacaaagt taactaaccc gtaaatgaaa ataaaaaatt ttttaaaagg gaaaccaaaa 240

ttaaattaaa tggccgtgtt ttaaaaacgt ggtaattgga aaaaccttgg ggtaacaaaa 300

ataaatcgct ttgaaaaaaa tccccttttc gaaagttggg gaaaaaaaaa aaaggcccga 360

accaatcgcc tttccaaaaa attgccaacc ctaaatggaa aaaggaaccc cccttaaaac 420

ggaaaataaa acgcgggg 438

<210> 4312
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093b01b1

<400> 4312

catgtgcccg gacgcctaca gctacgccaa gggcgagcag accagcacct tcacctgccc 60

acctggaacc aactaccaga tcgtcctctg cccttagaat aggacgcgtt gaaggatcaa 120

aagtataata accgggatca ataaggaaca atgactactc tgagtagtct acttatatgt 180

atgtgccatg tcacgtatat gcatatgcat gactgtgctt gtatgttgac caataat 237

<210> 4313
<211> 62
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093b02b1

<400> 4313

cctacgcgtc cgcccacgcg tccgcccacg cgtccgcgca cgcgtccggt tctagatcgc 60

ga 62

<210> 4314
<211> 530
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093b03b1

<400> 4314

ggatgtcccg ccgtctgaat cgctaagcca gctggcgtat gggatgaata cagcacaggc 60

ttcccgccta ttctatcaaa catgtgtctt ggcaacgctt gatcgcatca aggtcacgca 120

ggtggaacca tacgggccca tcctgatctc gaggggggcc aacatgtgat catctccctg 180

ttaatcttaa atcacacgga agaaccggga gcctcttgca catctcatgt ttatatatct 240

atagtgtttt aagtctgcac aggaagaagt cttgtaggaa gctgcttagt tggatctgct 300

ggtgggaagc aagcgagtga tggtgctgtg ttattgcggt agtttggtca ggccacaggg 360

aaattctgta agatatgcca cgctgaaaga attgaccggc ggtgtaggtt agctgcttaa 420

actatgttca tcggngcgat atttatggta cctgagattt gctggttaag tatgtttaac 480

cggatattta ttatgttttt cctatcgcaa atgatgatgc cgcgtccgnc 530

<210> 4315
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093b06b1

<400> 4315

cgccgcctcc tctctcgtcc cggcgcgctt ggagctggac ctacccgcgc gccgcccact 60

atgatcatct ccaagaagaa ccgcaatgag atctgcaagt acctcttcca agagggggtg 120

ctgtatgcca agaaagacta caacctggcg aagcacccgc agattgacgt gccgaacctc 180

caggtgatca agctcatgca gagcttcaag tctaaggaat acgtcaggga gaccttctcg 240

tggcagcatt actattggta cctcaccaac gatggcatcg agttcctgcg caacttcctc 300

aacctgccat ctgagatcgt gcctgccacg ctcaagaagt ctgccaggcc tactggccgc 360

ccactcggtt ctggcccacc tggtgaccgc ccaaggggcc cacctcgctt tgagggcgac 420

aggcctaggt atggtgacag ggatggctac cgtggccgtc ctcgtggtgc acctggagac 480

ttt 483

<210> 4316
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093b08b1

<400> 4316

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cgacaagctc ttctatgagg ccttggccgc ccatgaccat atggggatcg gcacggttgt 180

gcgggaatgc cgtgggctgt tcaatggtct ggagtcactc accgactgct gtggtggtga 240

cgggacgacg gccagggcca tcgtcaaggc ctacccgcat atcaagtgca atgtgttgga 300

ccttccacag gtgatcgaca aagtcccgag tgatggtgtt gttaactatg tcgctggcga 360

cctcttccat accgtcccac ctgctcaagc cgtcatgctc aagcttgttc tacacttttg 420

gagcgacgag gattgcatca aaatccttgc tcaatgcaag aaggccatac cttcccgaga 480

aa 482

<210> 4317
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093b11b1

<400> 4317

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tgacacggtg gcctccgcgc tgaccacgct cttcctccac ctgtccaaga accctcaagt 120

cgcggcagcc attcgcgcgg aagccggcgg cgacaagccg tccacgtacg agcatctcaa 180

gagcctgcag tacacgcacg cggtgctgta cgagaacatg cgcctgttcc cgcccgtgca 240

gtttgactcc aagttcagcg ctgccgccga tgtgctcccg gacggaacct acgtggaagg 300

agactcgcgc gtgatgtacc acccgtacgc catgggccgc atgccgagca tctggggcgc 360

cgattacgag gcgttccgcc ccgaccggtg gctcactgga gcc 403

<210> 4318
<211> 534
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093c01b1

<400> 4318

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attgacaggg cttgaggggg agcttaaagg gtggagggta ggggagacct ttgaagggtt 120

cacagggaca tcctcattgt cgacaacgaa tgatgatgat gcatctagca cgaatacaga 180

ggctgtgttc gtcatctcgc cgaatggcaa gttcaagcgg aacatcaagt catggatgcg 240

tggtgcactt ctgggaagtg gctcattcgg gatggtgtat gaggggatca gtgatgaagg 300

tgcgttcttt gctgttaagg aagtatcttt gcttgaccaa ggaagcaatg cacagcaatc 360

tattctttca cttgaacagg aaatcgctct ccttagtcag tttgaacatg aaaatatagt 420

ccagtattat ggaactgaca aggaagaatc aaaactctac atttttattg agctntgtac 480

acaaggttct ctttcatccc tctatcagaa gtatanactg cgagactcac aagt 534

<210> 4319
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093c05b1

<400> 4319

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gtctttcttc cctgtgggaa acccccttccg ggtcatcctt ccaggggggac ctcacctgcc 180

taggaagctc caggcgctgc tcaagtcata cgaggatgcc ctggccttga gcttgaggaa 240

gctaaagcca gagaatgcct tggaggtcct caccttgtcc tggatgaggc ttgctgtcga 300

ttgcttgtca gagctgcatg ccaacatagg caccctgata accgagctcg agctgcctgt 360

ctcggattgg gatgagaagt gggtggacat ttacttaaac agcagcgtga agctgctgga 420

catctgcatc gcgctaagct cggagcttgc tcggctggat caagggca 468

<210> 4320
<211> 492
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093c09b1

<400> 4320

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ggagaggaag caggaggcgg cggatcaagg agaggagact agaagatggg tggcggcatg 120

gaggtgaaca agaaccgctg gatcgaggag tggaacgccg gccgggagaa cctcgagctc 180

aacttccgct ttacccgccg cagcctcgcc gtcatcggcc tcttcggcct cgccgtcccc 240

atcctcgtct acaagggcat cgttcgcgaa ttccatatgc aggacgagga cgccggccgg 300

ccgtacagga agttcctgtg agcgtcgcct ccggtggatg tcgagactcc gagccgtctg 360

cagggtttcg gtcagggaga aggaatctcc attcggtttg tttcccgtac tgttgtagtc 420

agaccggagt attttgttct cacatgttgt gcgatatgtg ttaaataaga tgtaatgaaa 480

tgctgttctt gc 492

<210> 4321
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093c12b1

<400> 4321

tcggtaactg ccatcgcaag cacacaaaga ggtggtgtgc acactaaagc tcattcagtg 60

gctgatgttt tccggacttc aatttatcag atagtctcag ccttcttgga tgacatgcgg 120

gcaaatgcaa aagcttcgag tttggagaag aattggatca gtgaaggaag aaaacctata 180

catggttcac gtgctgtgtt ggttcagaag ttgagcttgt ttattgaata ccgagctgtc 240

tgaactctgt gtgatgtctc tcaaatcgac agtctgttgg gatgaaggaa ttttgttatt 300

ggccaaaatg cttgtttcag tgaagtttgg agctgctgac actactatca tctcattgag 360

gtcaaggaat atttgtttcg gcactatgat ccactggcga aaaatcattt tccattcccc 420

atcttttgga gaacaagaag ggccatgacc tgttattatt atgatttctt gcaaaccaat 480

ctcacta 487

<210> 4322
<211> 524
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093d04b1

<400> 4322

gtcttctcca agaacctcaa gcttggcatc caggaggact cccagaacag gaccaagatt 60

gctgagcttc tgaggtacca ctccaccaag agtggtgatg agctgacgag cctcaaggac 120

tatgtgacca ggatgaagga gggacagaac gagatctact acatcactgg tgagagcaag 180

aaggctgtgg agaactctcc cttccttgag aagctgaaga agaagggcta tgaggtcatc 240

tacatggttg acgccattga tgagtatgcc attggtcagc tcaaggagtt tgagggcaag 300

aagcttgtct ctgccaccaa ggagggtctg aagcttgatg agagcgagga cgagaagaag 360

aagcaggagg agctcaagga gaagtttgag gggctgtgca aggtcatcaa ggaggtgctg 420

ggcgacaagg ttgagaaggt tatcgtctct gaccgtgtgg gggactcccc ttgctgtctg 480

gtgactggcg aatatgggtg ggaccgncac atggagagga tcat 524

<210> 4323
<211> 405
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093d08b1

<400> 4323

tcgcatagct ggagcccaag cctaaacctg aaccgaaacc gaagccgcct ccgaagtgca 60

aaccaccaac cactcacagt tgatgggata ctgatatatg ccagttgctg gaggagaccc 120

tgtatgaagc cacaatgtgt tatttctaga ataagtggtg ttgtattccc tgtattcatt 180

tatagttcca tgcacgtgtg atgggtatta gtactttgta attattattt tcttgttggt 240

atatgttaat ctactttgta tgtgactcga ctcgttgttt taagtatcta tgcatgattg 300

catccattta tacgaatgag ctattttgtc caaaanaaaa acaaaacatt aaataaattg 360

caaaacatac acctttcaaa aaaatagata agttccgaac aattt 405

<210> 4324
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093d11b1

<400> 4324

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gtccacggtc accgagtcga cgtccacggc ctcggcggcg gcggagcagc acggcaactc 120

gggcagctcc gcgtccgcct ccgcgtccgt caaggaggag tgcttcacct cgtccgagga 180

gtcggaggag ttccagatcg acgagagctt ctggtcggag acgctgtcca tgccgctgga 240

cgacatcaac gacgtctgca tggagcccca cgacgcgttc ggcaagccca cgggcgccgc 300

cgacggcgac atggactact ggctcaaagt gttcatggag ggcggcgacg acgacaacaa 360

caacaacggc gcgctagact taccgcagat ttagggaggg agagagctct agtttcgtcg 420

ctgctcccga ttgatcgttc ttttttctct ctct 454

<210> 4325
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093d12b1

<400> 4325

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caagaagctg accaaggctg gcaagccagc cgaactctgg gggtccaagg ctggcatggc 180

taaccagttc cagaagctcc aacttgacgg tggtggcaag ggccaggcca aggacgccgg 240

tggcaagggc cagtccaagg acgccggcgg tgccaagggc cagaaaggtg gtggcggcgg 300

cggtggcgcc ggaggtgcta gcaaggacgc aaagatgatg atgccgccgc cgacggcgca 360

gcagcttcag cagctgcaac agcagatgca gatgaaggga atgaagctgc cgcagttcat 420

ggacgggaag atgccgttcg ca 442

<210> 4326
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093e02b1

<400> 4326

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cgggccgttc ggcgagaaca tcttctgggg ttccgggcag tcgtggacgg ccgccgacgc 120

ggtgaagctg tgggtggacg agaagcagaa ctaccatctt gacagcaaca cctgcgacgc 180

cggcaaggtg tgcgggcact acacgcaggt ggtgtggcgc aagtcgaccc gcatcggctg 240

cgcgcgcgtg gtctgcgccg ggaaccgggg cgtcttcatc acctgcaact acaacccccc 300

gggcaacttc aacggcgagc gcccgttcgc gttccttacc cttggcgccg aagccaagta 360

gtacgtacgt gtgaatgtga tcatgcatgt gtacgtacgt gcgtgtcttt atgtgtgtgt 420

ggtttgaata tttatacgtc tacgaacgct acgtacgtac gtaaataagc acacat 476

<210> 4327
<211> 536
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093e07b1

<400> 4327

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gccctggcaa tacttgtctc tggtgggatc gtattgcaga ttttggcatg tgctctttat 120

aacaactggt ggcccatgtt gacagttctg atgtacctca tactacccat gccgctcata 180

tttttcctgg gctccgattc tccatcgatc atgtcaaatg agaatgatgg gtgggtgaac 240

ttcaccaagt tcctgacggg cgcgtccatc gtgggcagca tcgccatccc gtcgatcctg 300

aagcacgccg gcgtcatcgg gtggggcgcg ctgacgatgg agctgtcctc cttcgccgtc 360

ttcgggctgg ccatcgtgtg gttcctccag atgaactccg aggacgagta cagcgccttc 420

tgatctccag cgctttatcc tctcccgcgc cttctgatct ccagcgcttc atccagtccc 480

aaacctgtgg tctgcgtgtt tctagtggcg cctcgctaga aatagggatc atcaac 536

<210> 4328
<211> 78
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093e08b1

<400> 4328

cctacgcgtc cgcccacgcg tccgcccacg cgggcgccca cgcgtccgcc cacgcgtccg 60

tctagatcgc gagcgggc 78

<210> 4329
<211> 514
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093e12b1

<400> 4329

tcgctcacgc gtccgcccac gcgtccggac aaagaggact ttgatgattt ctgttctcgg 60

gcctcggagt tggcagagca ggcgaatgga gcaccgctct tcactgtcgt gcagtcagtt 120

cagccgtcga aacagatgta caaccaggat gacgggtccg gctgttcagg ctacggcgtc 180

tccgacaaca tcgacacgga ggacctcgat ggctccggcg aaacaggaga agacgagtgg 240

cagattctct gaatgaaagg gaagtttaac ttcagttgtt cggttaaacc ttcacatgac 300

ccctgtgtga agtaaagact tcaaaaacct cgtgtgaaat ctagggtttc cagttctacg 360

gaacaagcgg gtgtgctgct tgttccgcgt agctgggagg ctggaaaagg taggagccgt 420

tatgctgatc atcggatcgg caccaagttg gttcgatggg aaattcctct gtaccatacc 480

gtacgcgctg ttgtgggtga ctgcaaaatg tatc 514

<210> 4330
<211> 490
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316093f05b1

<400> 4330

gaaatagttc tccatctcaa ccttctcttc tcccttgtct tctctcccgc gcgttacctc 60

gaaccggaag cgaactctac atccatcctc gaccgatgga tccatgggtc agcagccagc 120

cttcccttag cctcgacctg cacgtcggcc tcccgccgat ggggcacccg caccaccacc 180

aggcggcgcc catggtcgcg ctggccaagc ccaaggtcct cgtcgaggag aacttcatgc 240

agctcaagaa ggaccctgag gttgcggttc ttgagtctga gctacagcgg gtgagcgagg 300

agaaccggcg gctgggcgag atgctcaggg aggtggcctc caagtacgag gccctgcagg 360

gccagttcac cgacatggtc acggccggcg cccacgccgg cggcaacaac aacaactaca 420

acaaccagcc gtcctncgcg tcggagggcg ggtcgggtgt cgccgtcgag gaagcgcaag 480

agcgaggaga 490

<210> 4331
<211> 128

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093f07b1

<400> 4331

ttttctacgc gtccgcccac gcgtccgccc acgcgtgcgt aaaaaaaaaa aaaaaaagaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaat gaccaacaat atacaataaa 120

aaaacatg 128

<210> 4332
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093g01b1

<400> 4332

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ataaaccgag ttatggttct tggctagcag tccctatatt atgatctcaa aacattaggc 120

gaagtgggtg agattacatg cccggtcgaa tcccaagcaa agaatgtaca ggagtcacag 180

tacaatgctc tggttcctgt gacctgaccg ctagtgccac agcgccgccc ggccgagccc 240

agcccagccg gcacaaaccg tagggcgggg agacctttgc acttgcaggc acgcccggcg 300

agaagaacga tcgaggagaa gcgcctacaa ggcggcgtcg gcgacgcggt cggcgaaccg 360

ctggagcgcc tcgcgcatcc agaggtgcgg gcagcggtcc atggcgtcct gcacggtgac 420

<210> 4333
<211> 523
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093g06b1

<400> 4333

gtcaatgctg gtgccggtgt gggtgccggt gctggtgccc ttgatgcatt gcgacagctt 60

ccacagttcc aagcactgct tgcattggtc caggctaatc cccaaatcct gcagccaatg 120

cttcaagagc tggggaaaca aaatccacag atcctgcggt tgattcagga aaatcaggct 180

gagtttctcc gcctggtaaa tgaaacacct gagagtggtg ctggcgggaa tatactaggc 240

gcgctagcag ctcaaatgcc acaggcagtt caagttactc cagaagaacg ggaggccatc 300

cagcggctcg aggggatggg gttcaaccgt gagcttgtgt tggaggtctt ctttgcatgc 360

aacagggatg aagaactggc tgccaattat cttttggatc atggccatga gtttgaggaa 420

caacaataga tgttagattg gtcttgctgt tgaaagacag aagagtcagt gacagaagca 480

tttcagtttg gtgtcgtctt atatcttgct gcttgatatc act 523

<210> 4334
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093g12b1

<400> 4334

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agtttaccca ccggtttact gcgtccttgt gagttgtgat cattatcatg cactcgtcag 120

ttgcttgtca tgtatggtgt tcttgaattt tcagctacat aatggtcggt tgtgtgagtg 180

aatgttatgg tgttcttgaa tgctcatgtg tcagcctgtg tgttgactgt tactgtgagt 240

caattagcta aaagaagtgt gatgtgtggg ttcagcgagg gtgtaacagt cactgaataa 300

gaatgtaagg gtcctatcct atatgtatgt ctaaaatagt aacatgtaac atgtgttgct 360

ctttctttc 369

<210> 4335
<211> 140
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093h01b1

<400> 4335

ggggaaaaga atgggtagca cacttttga ttcgtttgta gatcggtgga gatgcaatag 60

aatcatagag agggtgcagt gatgcatgcg attttatgtt caaacaagcg gccaaatggc 120

ccgaaaatac actcttgaat 140

<210> 4336
<211> 392

<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093h04b1

<400> 4336

cctatcgcgt ccggacaggc ttgatggtct ggaagttgag tcaggaatca actgaaagca 60

atgtgaatga acctggatac tgtgtagtca tcttctattg tgaaatccat agctctggca 120

aggatgtaaa aagtcggtgt agaccacccg tccgaggtga agaccgagca gtatgtcaat 180

ttgagagtaa ctggtgtagc aaacattgta ttatatacca tgttctgaac agaagagcgg 240

agttattgta aaaactatct aatgtttagt tgcttgtata aaacacaagt tttgaagaaa 300

aaaaaaaaca acgaaaaaaa atgaaaaaaa aaaaaaagag gcccaactta atagaggggc 360

cccactttcg gcttttccta aatgggggggc ct 392

<210> 4337
<211> 73
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093h07b1

<400> 4337

ggtttctaaa aaacgaaaaa aaaaaaaaag gtgagaaaaa aaaaaaaaaa agaagctgat 60

gactaaccat gaa 73

<210> 4338
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093h09b1

<400> 4338

atttaaaaaa aaaaaaaaaa aaaaaaaaaa gaagaaaaat ttaaaaaaaa aaagggggt 59

<210> 4339
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316093h12b1

<400> 4339

tttctttgag ctcaggagga agctatatgg ggggcggtcc aggaggagcc acgggaggag 60

ccgcagccca agcccacagc acaggaggga caaccgtgac cgtggtggtg acttccgccg 120

tgatggccgg gatgaatacc gtggcggcgg cggcggtggc ggttaccgtg gaggcgatgg 180

aggtgatggt ggcggttact gtggaggcgg tggtggtggc taccgtggag gtgatggggg 240

cggctatcgt ggtggtggcg gcggcggtta ccgtggtggc ggcagatgag gtggtggcag 300

gcatgatagg tatgatgatg gaccgaggcg caggtatggt ggcagcccgc cacgacgtgg 360

aaggagccct cctgcaaggg agaacagtga ggagcgcagg gccaagatcg agcattggaa 420

ccttgagagg gaggagaagt gatgaaaccg cgagtagtgg aaccgcaagc gtcattttac 480

ctttt 485

<210> 4340
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094a05b2

<400> 4340

tcgagatttt ggcggactcg agtccaatcc aatccactcc aaggctgagg tcgagatcaa 60

acctaccgga gatgaagttc ttctcggcgt tcgacccgcg gccggtgttc ttccgccggg 120

agtggggccg cacctggccc ttgctcgccg gcttcgccga cacgggggcc ctcatcacca 180

agatgaccgt cggcttcacc gaggaggacc tcaagatctc caagttcatg caggcgcaca 240

agatgaagta gtcgccgacc gcccggaccg tccgccgcca ggtcacaggg gcagcatctg 300

agtaaccagc atgtgtcctt gatgcgggga gacagtcctc accctcacta ttgtgattga 360

gcttttatgc ttatttttc aaatgcaact gcatgcatta ttgctgctct ggtttgtaat 420

gtaataagcg acatttgaat cgttgaatcc aagaaaaaaa cggcttcgga t 471

<210> 4341
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094a07b2

<400> 4341

gttttaaccc agtaaactac tgccacccat ccgccggcga aatggcccac ggccgcatcc 60

tccccctggc gctcgccgtc ctggccacgg ccgccgtggc cgtcgcctcc tcctccttca 120

ccgactccaa cccgatccgg cccgtcaccg agcgcgccgc ctcgacgctc gagtccaccg 180

tcctcgccgc gctcggccgc acccgccacg ctctccgctt cgcgcgcttc gccgtcaggt 240

acggcaagag ctacgagagc gcggcggagg tgcggaggcg gttccggatc ttctccgaga 300

gcctcgagga ggtgcgctcc accaaccgga agggcctctc ctaccgcctc ggcatcaacc 360

gcttctcgga catgagctgg gaggagttcc aggcgacccg gctcggcgcg gcgcagacct 420

gctcggcgac gctcgccgga accacctgat gcggga 456

<210> 4342
<211> 310
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094a11b2

<400> 4342

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gcgaggaggg tggtcgcggc ttcggccgtg gccgtggccg tggaggccgc ggtggccgcc 120

gtggccgtgg tggccgcggt ggcgcccccg gcgacaagaa ggagtgggtc ccgtgcacca 180

tgctgggccg ccttgtccgc gacggcaagc tgacctccct cgaggagatc ttgctgttct 240

ccatgccgat caatgagcac gacatcgtcg accgcttgct gggcgagagc ctgtaggacg 300

aggtgatgca 310

<210> 4343
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094b01b2

<400> 4343

gcgtattcct ttgggttccg tagtaaacgc cttaggacta agcgttaccg gaatatgctt 60

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gcatccgctg caagctctgc acagtataca gtgggtatat acgatgcctt cggcaataca 180

gctagtacct tctggaccgc gggtggaggc gcatttgcac cggatatcag ctctggtgtt 240

cctacaatta ctggtaacat tgacgtacgt ggcggtgttc ttggtatacg cgttaaatat 300

actaatagat aaaagtggat gaaaaaacca ttgcgatacc catcgtaatc gccttgcaag 360

acatacactt ttgctcaaaa aaaaaaaagg gcggcc 396

<210> 4344
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094b03b2

<400> 4344

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gaacgtgcgc actgtcgagc ccagccagag atgattagct cgaccttgtg gcacttactg 180

ctgttatgcc tcctctagga tttgtgtaag tgatgtggtg tgtggttgcg tagatcacgc 240

agtattaatt catctgatgg ggataataat gtttgatgtt tagtttttc tttcttctga 300

attccgtggc gaggattgat ttgcttggga ccttttctgt tgaggaataa taagcagtat 360

aatgttcgtg ggtggtatat gttggttgct gcgtgaggcg gagttagttt gaggagtagg 420

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<210> 4345
<211> 61
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094b06b2

<400> 4345

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a 61

<210> 4346
<211> 486
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094b07b2

<400> 4346

gtcttcctcc tccccaacta ctcctctcct ccgcgcatcg catcgcaccg ggggtcacct 60

gagatcacat acacaatggt gaaggctgtg gctgtgctta ccggcagtga gggtgtcaag 120

ggcaccatct tcttcaccca ggagggagat ggcccgacca ccgtgacggg aagcgtcact 180

ggactcaagg aagggctcca cggcttccac gtgcacgctc ttggtgacac caccaacggc 240

tgcatgtcaa ctggaccaca cttcaaccct gctggtcatg tgcatggggc accagaagat 300

gaaatccgcc atgctggtga tcttggaaat gtgacagctg gagcggatgg tgttgctaac 360

atcaatgtta ctgactgcca tatcccnctt actggaccaa attcaattgt tggccgtgct 420

tgtgtcgtcc acggtgaccc tgatgatctt ggcaggggtg gacatgagct tagcaagagc 480

actgga 486

<210> 4347
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094b10b2

<400> 4347

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gcatcttttt gagttatccg tggtgatcgg atggacagcg cgaggagctg tctcgtggac 120

gacgtgagca gcggcgcgtc cacgggcaag aaggcctctc cggcgccagc cgcgccggcg 180

accatgccgc tgcagcgggt cggcagcggg gccagcgcgg tcatggacgc gccggagccc 240

ggcgccgagg cggactccgc ccgcggcggg cggctgccgt cgtccaagta caagggcgtg 300

gtgccgcagc ccaacgggcg ctggggcgcg cagatctacg aacgccacca gcgcgtctgg 360

ctcggcacgt tcac 374

<210> 4348

<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094b11b2

<400> 4348

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ccttcctagc aaagacgctg aagaacctat atctggtgtc ctgaagtacg acagtcgcat 120

ctttcaccag tggacgttta acactgaagc tcacccttg agaatcgttc cgacacatgg 180

atgtaactgc cagtcaattg aaactggaaa tccagtggct cgaccaggcg gtaggaatca 240

aggtaaacat gagtaggcct gaacaacaca acagaggatt tttgcattcg ccgagagatt 300

gtgacctgcc ttgatgagaa cgctatgata cgatgggaat ttcttactgc agcggctaag 360

actgcacata acggcactag gctaattacg caacacaatt gtaggttgag cat 413

<210> 4349
<211> 261
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094c01b2

<400> 4349

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cgcccacccg acccggcgag cgccgggggg cacacgaaag cccacgcggc ggcccacccc 120

aaccccaacg agaccggaaa ccgccaaagg ggacaaaaac cgcccaacca ggcccagcga 180

acgaaaagaa aggaccaccg caaaaacaag aaacggagag cccacccgcc ccaaaaggga 240

aaacaaaacc acccgcaaaa c 261

<210> 4350
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094c05b2

<400> 4350

caatgacaag ggcaggctga gcaaggagga gatcgagaag atggtccagg aggctgagaa 60

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ctactcgtac aacatgcgca ataccatcaa ggacgagaag atcgcctcca agctgccggc 180

cgacgacaag aagaagatcg aggatgccat cgatgctgcc atccaatggc tggacacgaa 240

ccagctcgct gaggcggatg agttcgagga caagatgaag gagctggagg ccctgtgcaa 300

ccccatcatc gccaagatgt accagggtgc tggtgccgac atggagggcg gcatggacga 360

cgacacccca gctgcatccg gcggccctgg ccccaagatc gaggaggtcg actaaacagt 420

<210> 4351
<211> 478
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094c08b2

<400> 4351

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gggatcatct acgccatcta cgccatcacc aagtaaatca aggcagccgc cccgagtgtt 120

ccggcggaat agtagtatat ttccatgatg atctcgcctg tctattccta gcgtgctcgg 180

gttattgctt gtgtgggttc tttgaattct tttccgtgta cgttgacgat gcgaatttct 240

ctgtggtttc catggaccgt gtgaagagat ttcagcttct ttatatgtac tatgtatatg 300

cactagtatc atgtatggga gtttatgcat acagtactta ttgttgaagt tagattaccg 360

cctccctgtt caagtctgga atcggcagtg atgtgtatgt agtcgggttt ctcatttgat 420

ttttcagttt ttcttcagta nnntatatat anataaagaa gcatcaggtt ctactggg 478

<210> 4352
<211> 117
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094d02b2

<400> 4352

gnatactcag acaccgccac gtacgacaat gcagggagta tttagaggca ttgttggtgt 60

tggcccaccc tgactagcga gtgctaccac aacagggcgg atcatggccc cctgggg 117

<210> 4353
<211> 512
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094d07b2

<400> 4353

ttttacgcgt ccgcccacgc gtccgtacag agcacttatt ccagatttgt accgtgggaa 60

ggttgctttg gaggtagctg aagcacaaca tctgatggaa ggactagact ggcagggtgc 120

aatcaaggat attcaggctt cagttaaatg gctgaaggaa aatggatcac ccaaggttgg 180

tgttactggt tattgcatgg gaggtgcttt ggcaattgca agtggagttt tggtcccaga 240

ggttgatgct gttgttgctt tctacgggac gccatcttcg gagcttgctg atgcttccaa 300

ggcccaggct ccaatccagg ctcattttgg ggagcttgac agttttgttg ggtttgcaga 360

tgttaccgcg gccaagtcgt tggaggagaa gctcaaggct tctggagtgg cacatgaagt 420

ccacatatac cctggatgct cacatgcctt catgaacgca tcgcctgagg ccgtcaagag 480

gaggaagggc antggtttga ctgatgagaa tc 512

<210> 4354
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094d09b2

<400> 4354

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ggtcggaatc ttctccaggt tctcttccgg cgccggccac cgccgcgcca agagtgccgt 120

cgaggttgtg gagacattgg cgcccaacat ggagactggg gagtctgacc cggcagccga 180

tcctggagat agccctcacg gcattgaggt cggcatcgag ttcaagccgg tggagcaccc 240

tgtggagcct gtcaaccttg accaaccagt gaaatgcccg cttcctgagc catctatact 300

gcatgatgga aggatatggc aagagaggat gtctacagcg ggcgggaggc cgaggacaga 360

cctgccggtc gtgaaggaag ggtcgcagct cgagcccgac agcagcacca caaggtcgag 420

gtctgcggtc cggaggcgcg ccatactgcc ctccgtgagc gcccctgagc ataaca 476

<210> 4355
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094e08b2

<400> 4355

gttggaatgg gtggcggcgg tggtggcagc aacaatggtg ggttcggcaa cggtggaggt 60

agcggatctg gatccggcag tgccggatac ccctaaattt ccttttcgaa caagctagaa 120

tcggagccca tcacacattt ctagtctctt catttcacta ttccacgtca tttgtgtttc 180

ttttcattcg tagagttttc actaggcgcc tcctaataaa gggctccatg attccagtgg 240

atgtattaag tagttagtgg agcaatctac taacacgtaa tcgctaccta cgtacgaata 300

cgttatgtta tgatttctga tatgtttcgc tgctagtgtg agtgcttggt tactccttcc 360

gaagcaatat gcctagctaa ggttgtctaa aaacaaagct aatggttatt ctg 413

<210> 4356
<211> 527
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094f04b2

<400> 4356

gcatcggcgg cagacacggc cacggccacg gccagggcct cggcggcggt gctcaccgcg 60

ccgctgtcgc tggaaggggg cctcgcggcg gagctccagc cggcgaacct cgtgcagcgg 120

gtgctcagcc tcttcgggaa cgtcaggccg ggggccgatc tctcgcactt ccagctgcct 180

gctacgttca acctgccaaa atcgcagctc cagttgtacg gggaaatagt ctactgcgac 240

ggagatgact acctgagcag atgcggcaaa ggcaaggaca gcctcgagcg cttcacggcg 300

atcgtcgcat ggagcatctc gacgacgagg ccgcccatct tcggtttcgc gccctacaac 360

ccggtcctcg gagagacgca ccatgtctcc agagggtcac tccatgtcct tcttgagcag 420

gtgtctcata aacccccagt ctcggcgctt cacgctaccg atgacggcgg anacgtcgag 480

cttgtctgga gccaacaccc agtgccgaaa tttaatggtg ctagcat 527

<210> 4357
<211> 282
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094f10b2

<400> 4357

gacggcttac cttgattata tgcgtgatcc tatacaacat gttgatctgt catggcgcct 60

ttacaagcct attgactgtg tagaagccgt agtccataca ccaacataat aaagctgtat 120

gggccacatt ncgctttgtt gcatgaacaa ctgataccga gaagtgcccc taacgatcac 180

cattgaaaaa ctggcgctcc ctgaatgaca aatgaaacag gcccttgatg acaccatgac 240

tcaccttggc agtggccggt tactctacaa cgtgaccgac tg 282

<210> 4358
<211> 114
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094f12b2

<400> 4358

tcggttacgc gtgcggccac gcgtccggcc acgcgtgcga ccacgcgtgc gcccactgcg 60

tgcgcccacg cgtccgtcca cagcgtccgc ccacgcgtac tgtagatcgc gagg 114

<210> 4359
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094g06b2

<400> 4359

ccttcgcgtc cgcccacgcg tccgcccacg cgtgcgccca cgcgtccgcc gacgcagcac 60

gcatccccca tagccagtgc tcctcctagc ttgcttgttc cccggcggca gagaaaggca 120

gacagaggat gtcgaagtac gtggagctgc tggacatggg cgtgcgcatc gcggccaggt 180

tccactccca ctgcccgcag acggcgcgca tgtactacaa gccgccgcag tccacctcca 240

cgtcgggcgc cgccgaggac gcgccgacgg atcggaggac cgccggcttt gacggcggcg 300

aggacgtggc tgctggcttc cggcccttcg ccgcctcggg agctctcggc gccggcgtcc 360

agccccggtt cggcttcgac accgcgcagg tcctcatcta cgaggtcgta tgagtcgagg 420

gcttgaaatg aacaacggcg acgagttctt ccggagaaag atgagatctc ctggatgaga 480

ttttttttt tttttttg 498

<210> 4360
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094g07b2

<400> 4360

gatcttctga attccaaact gaagctttcc tcagttatgt tgtatccaga attgacagta 60

catgggaata tgggactgtt gtatttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gaaaaaaaaa 180

aaaaaagaaa aaaaaaaaaa aaaaaatggg gggggccctt taaaaaaaaa aaaatttcct 240

tccccgtgaa tgcaacttaa aagtttttta aaagggaaca aaaaaaaaaa ttaaggggg 300

ggcgtttaaa aacgggggaa tggaaaaaac cttggtgtaa ccaaataaaa taccttggaa 360

aaaaaacccc tttttcccag ttgggg 386

<210> 4361
<211> 428
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316094h02b2

<400> 4361

ggatcttctg ggtgggcccg tccatcggcg cggcgctggc ggccatctac cacgtggtgg 60

tgatccgtgc catccccttc aagagccgcg actagtccac caatcaacca gccgcgaatg 120

gaatcttatc tctgttcatg gtcggtcgat cgatcatgtg gtggtggcgg tggttgctct 180

cgcgcgcgta gtacgtggat catgtctcgg ccgcgcacgc tgtaatcatc tatatctacc 240

gtgctgttcc tcccctcctc ggtgtgtgtg cctgtcggca gcgtcacctg ttcaagtctg 300

cgagttgcac tttcccttcc ttgtgtattg cactacgcac gcgatttaat cgggcgtgca 360

tatctatgca aattattacg tattatgaag gaaggacgat cgagttaatc gcccttncca 420

acagttgc 428

<210> 4362
<211> 541
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094h04b2

<400> 4362

ggttgtgttg gcatgggtgc tagtgacgag gctgaaattc atggcattga tgtatctgtg 60

caaagaaccg agagtggtgt aggtgatgca gaacctatta ctgaccttac tgagacaatg 120

ggccataccg gtgaatcagt tccagggcct ggattgatgg atgagtttgt acctgaagaa 180

gttgatcggg aagaacctca tggagacagc caagatattg tgttccgttc agcaggccgt 240

gctgacagtg gatcaaaata ttttggttct aataaagctg attctggtga gagtggaaaa 300

aagataggac atgccattgg tcatgaaagc agcatgcatc cttctctctc ttgcaatgct 360

ggggtgtatg ccggcttcga tgcatctaaa gaggaagtga cacaggctgg caaagcagtg 420

actactgatg atcaaggctt gcaatatgat ctgcggaatg gattacgagc aacacatgga 480

gaaaatgact atgaaccagg tcttccaaga tttgatcctt gtaagcatca caacagttac 540

t 541

<210> 4363
<211> 55
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094h06b2

<400> 4363

acccgtcccg gatttccggg ttggccccac ccgtccggtt tttcctagat cgcga 55

<210> 4364
<211> 82
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094h08b2

<400> 4364

tttacgcgtc cgcccacgcg tccggccacg cgtgcgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtc cgtagatcgc ga 82

<210> 4365
<211> 290
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316094h11b2

<400> 4365

gttaggtcaa tggcagggga aaggaaatac gaggatgaga aaaagatcag agagaaggcc 60

aagaagatac gatcaacagg aaagtctccc cgtggatgct gcttttgaga cattgccatt 120

ctacaaaatt tgaaacaaaa tgaatggtgc gacttgaatg cgatatgagt ctcacaacag 180

ctatgtattg tattataaaa cgtatttggt ttgatgagtg ataagagtgt acagttgcat 240

ccaacatgca attgcattgt atcaggatca gcctcgaagg acaaaactag 290

<210> 4366
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095a06b1

<400> 4366

ccctcttgtc cgtgcatgct tgataagttt gtgattgatc acatgatcag tgtatctcat 60

tatggcatct aaatgcatga ttcatgtatt tgtaaaagga ttgtatgtgt atgaggaata 120

aatggttcgt ccaaaaaaaa aaaaaaaact cccctaccgc gaccaaacgc actcccacca 180

attcagagcg caag 194

<210> 4367
<211> 308
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095a07b1

<400> 4367

tttatgattt gcgtcgcggc cacgataccg cgataagttc cttctatagt ttgctgggat 60

ttttgggtcc ttccagctcg agtttttggt cgcgatgctg atgacgtgtc cggtgattca 120

gaggtatagt aataaataat ttggcaaaac tcacggatgc taggcgctag gcacttgtac 180

cgttgtacgg tccttgcaag cttgtaatgc tgattaatta tgtatgatgg catcttcaat 240

tagccttttg agtgctatat ctcaaagttt ctttttttggt caaaaaaaag tgaatacggg 300

ctggtcgt 308

<210> 4368
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095a10b1

<400> 4368

tttgttaaag gcagcctcaa gctgttccag aggcggacca tcaagcaagc gcatcaaagg 60

gagcgctggg ggagcaatgt ccccttgcaa ggctggacgt acaagcgaca acaccggtgc 120

accatcttgg cccgacaccg gcaccagaag cagcagcacc accgcattca tcggctctcc 180

agcctcccat gtcttctacg gtaccggatc tccctactct tatgataggt cagctgggca 240

cgccctctac tggggccaga gcccacttcc aatgagggag ccatatgcat acccacctgg 300

tgagccggag cccaatgttg gccttggaat gccataccaa gcccctccca tgacctaccc 360

caaatacgcc ggaaacaaca acggcctggg agcctatggc aatgccatgc ccccagcctc 420

aggctttcac caggcttact accgggagaa tcagccagtt ggaaatga 468

<210> 4369
<211> 454
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316095a12b1

<400> 4369

tttttctgtc ccgtcgcgga acccaacgcg cgcgcaccct ctctcccccc gaatggagcg 60

gcagcctcgg ccgcagctgg ccgtggcgga ggaggccatc gcgctctacg acacctactg 120

gttccaccgc ctcgtcctca acgcctactc ccctcccgcg ccccagccgn cgccgccggc 180

gcctgagcgc gagcangccg agcaggcgcc ggcggaggag agcaagagcg agctgcggcg 240

ggccccgtcc gggctgcagc ggcaccgcag gacgcggagc gacgaggcca aggccgccgc 300

gttccacggc cagctggagc cgctcaagat ccccaacggc caccgcgcga ggctcgagac 360

catcctgtcc gggaaggacg gnctggccgc gccggagccg ctgcccgagc gcccgaagcc 420

ggaggcgctg cggcccggcg ggaggaggcc gaag 454

<210> 4370
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b01b1

<400> 4370

agagcctgat gagttatggg gcaagaatgt ggcggagagg ctcgcttctg atgggcagag 60

actggcgagc atccaagaga gcatcgagga actgaagcgg aagatgggtg gcccggccaa 120

ggggcactcg gaatacgaga gcgtgagcag tcagctgcgc gagacggagg ggctggtgtt 180

ggagcagatg aacctcaaca gcaagttggc aaagaaggcc gagaattacc ctgcgctgtt 240

ggatagcatg aacgcggagc gggaaggtgg ttttccaagc aagaggaaga tgttggagca 300

ggtgcggaaa gggtcggaca aggtggcgag gctggagctg gagcttcaga agatacagta 360

cgtgctgctg aagctggaag aagagcacga gtacacaagg ctcaaggtgt cggagaagcg 420

cacccgggtg ctcctcaagg attatctcta cgggaggaag gaccaccgtg gaaagaagaa 480

gagggcaccc ttttgcagct gtgtgcgctc ta 512

<210> 4371
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b02b1

<400> 4371

gttcatcgtc ttccagccgc ttccttcccc atgcgtcccc ggcgtcactc accgtgcaca 60

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gcctacccct accccgcgca aggttactac cagggagggc cataccaggg gccgccggtg 180

atggcgccgc cgcagtacgc cgcgccgccg ccgcgccccc agcccagctt cctcgaaggc 240

tgtttggccg cgctttgctg ctgctgcctg atcgacgagt gctgctgcga cccctccatc 300

atcttcgtcg gctagatcac ccaaggccaa gccagggcat ccggcctggc atgctgtcaa 360

ctgtacaaag agatgccctc atcaaggata tttaccacgt tgttgccacg ctatataata 420

tatcatgatc tctctcctcc atatatatga acgtattccc ttattattgt tatctcacta 480

gtcactacgg tgttgcctgc ctttgtaact cg 512

<210> 4372
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b06b1

<400> 4372

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agaaaaggat ggaggagagc cgttcctccc tgctttgggt tgtatccagg aggtttgtgt 120

agatggacaa gatatcagcc ggattagcag atggctcgcg tcacttccca acctacacat 180

gttgtttttc aacggtccga agatagagca gcaggatatt gagatgattg gattgatacc 240

caatctgatc gatttgttgc tgcctttaca caaaacagac gacgctgggc ggctcatcat 300

taggcgcgaa ggatttcaac agttgcagag tttccc 336

<210> 4373
<211> 511
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b07b1

<400> 4373

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ccatggcacc caaggccgcc gagaagaagc cggtggagaa gacccccgcg ggcaagaagc 120

ccaaggcgga gaagaaggtg ccggcgtcca aggagggcgg cgacaagaag gggaagaaga 180

aggccaagaa gagcgtggag acgtacaaga tctacatctt caaggtgctc aagcaggtgc 240

accccgacat cggcatctcc tccaaggcca tgtccatcat gaactccttc atcaacgaca 300

tcttcgagaa gctcgccggc gagtccgcca agctcgcgag gtacaacaag aagcccacca 360

tcacgtcccg cgagatccag acctccgtcc gccttgtcct tcccggcgag ctcgccaagc 420

atgccgtctc cgagggcacc aaggccgtca ccaagttcac ctcgtcctag gctcctcggg 480

cgtagagact tgtgtttatt tcttcttcct c 511

<210> 4374
<211> 232
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b08b1

<400> 4374

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taggatattt ccaaggaaca cctaagttgt ctttttttttg tctgactagc tgccgctgct 120

tgttgagtta ttctggaatc tgttatgcac tttgagattg ggtgcctttg ttcgaaatct 180

atgagctgtg tctgtcgcta tctctgaata attctatttg cactattacg tt 232

<210> 4375
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b09b1

<400> 4375

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cgatgtgaaa ccaaaacaaa ggataatgtc tttgtgactg ttgttgcttc tgtccaatac 120

cgtgcccttg ttgataaggc atctgatgcc ttctacaaac tgagcaacac aaagcaacaa 180

atccagtcgt acgtctttga tgttattaga gccactgtcc caaagctgga gctggacgat 240

gcatttgtgc agaaagatga cattgcaaat gctgttgaag aggagcttga aaaggcaatg 300

tctatgtatg ggtatgagat tgtgcaaact ctgatagttg acattgagcc tgatgtgcat 360

gtcaagaggg caatgaatga gatcaatgca gcttttagga tgaggtcggc agtcaatcga 420

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gtccttggct ggtgtgggat tga 503

<210> 4376
<211> 168
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095b12b1

<400> 4376

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attgtagttg taaatcttag gaagggtgtc tcaacttgta acacttacac tgtatcggtg 120

cagacgtttg attttacgta tgatgtgtac tcaaaacaac aatgacgt 168

<210> 4377
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095c03b1

<400> 4377

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cttcaagttc tctgaatctg gagattccat catccccttg gaatgaatca ttggagaagc 180

acacgataca tgaataggag aaatgcatca cactcgagtt tggagaagaa aaaaggatac 240

aaggacaaag atagatcagt attctgctct aaagctgaaa ctctttgtgg gatccatgtt 300

acttgattct attatggacg tatgaattgg ttgtatatat ttacatta 348

<210> 4378
<211> 295
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316095c05b1

<400> 4378

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acgccgtcgc gcaggcatcc cacttcctct tcaccagcta ggctgctgct gcatcgatcc 120

gataggaaaa ttaatcttct tcttccttgt cgnttcttct tctctccgct gttcatagag 180

tcaggattca agaaaagaaa aggcactgtc gattgggtga atgaactcca tgtgtactgg 240

cgccgccgca cgggaaactc tctgaaatat aatcgacata agcttctacc gcttc 295

<210> 4379
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095c08b1

<400> 4379

taacttgacc ggagagaaga cacggtcccc cggggaggag gtggacaagg tgtttgttgc 60

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gcccctgcct ctctgctaat catggagatg acgagaagat gctgtgcttt atgattctga 180

atgctccctt tgttctgaac tgataatgtt actgtttctc gaatttatac tcctatt 237

<210> 4380
<211> 488
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095c12b1

<400> 4380

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ataggccgcg gcggcagcga cgggagcagt cgccacggca ggagcgtgcc gttgggccag 180

tccgggcggt ggccatcgtt cctgtcgcgg accttctcgg cggcgtgggg gtcgaggtcg 240

acacggaagg ccgagtagga caggtcgagc aagggcggga agccggacgg cgccggcggt 300

aagtcagtgg attgcaaaca ccaagtagtg cgccgctggg caacgtgaat agtttgaccc 360

gggccgtggt caaaccgggc atggttacga aacggttgct gggaatggga agaaaacggg 420

cgatggtttt cgtggtggcg aggaacttct tgttggcggg gtgtttttttt taggggacaa 480

atttttt 488

<210> 4381
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095d07b1

<400> 4381

ttgtaagacg gccggggcga gctctccagc ggttgctatg gtggatacga gggtatgtga 60

ggtcatatac aaggttgaag ctattgtata gtgtgaccta ggtccgctca agtagtcgga 120

ggtcaacaag ctagtgactg ccacaaccga ggggttgccc atctaagaga gctaggacta 180

gaagaatatt taggcagatc ttatggagaa gatagggccc taccg 225

<210> 4382
<211> 65
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095d12b1

<400> 4382

tcgttcacgc gtccgcccac gcgtccgccc acgcgtccgc ccacgcgtcc ggttctagat 60

cgcga 65

<210> 4383
<211> 85
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e02b1

<400> 4383

ctcattcgtc cgcccacgcg tccgcccacg cgtccgccca cgcgtccgcc cacgcgtccg 60

cccacgcgtc cgttctagat cgcga 85

<210> 4384
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e05b1

<400> 4384

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ttcctcgcct ttctccttga ggttcatcgc agaaacaaga aactcgcagc catggacaga 120

tctgctgttt ctcaggccct tccggtgcac caggaagacg aggacctgtt cgagacctcc 180

tcctccttct cctgcgactc cgacgacgag gcccagttct cagacggcga ggaccagttt 240

gtgccggctt ccccgccggt gcggagactc aactctgaca gcgtctacga tctgtcgtcc 300

atgaaggccg aactctccgc caagaaaggg ttgtcgaaat actacgacgg aaagtcccag 360

ccgttcgcgt gcatgttcga ggtgagatgc ctggaggacc tgcccaagaa gag 413

<210> 4385
<211> 254
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e08b1

<400> 4385

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tcctcttcgt tgtctgatga attctgtagc tagctgtgtg tgttctgaca gcgtcatact 120

gtaacaatgg tgctgcctga ataaatagtc atgttgctgc ttgaatggac gactgtcgcc 180

ttggaaaaaa aaaaaatata aaaaaaaaaa aaaactacaa aaaataaaaa aaatatcaaa 240

aatcaaatca aaac 254

<210> 4386
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095e10b1

<400> 4386

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aagagataca accccaagaa gctgacctat gagcagagga aggccagcct cgttgaaagg 180

ctcaacgccc tcaacaactc tgcgggtgcc gccgatgacg atgaggacga cgacgagtga 240

agagctcttt gtccacccca gtgtagtctt gcaacgtgcg tttttgttaa agtccggcac 300

tctgcacaat gacctgttcc attgagttct gtttgtcctg ctggagttat agattgtgtt 360

atctgggtta tgtgccgtgc tggcatttgg atctt 395

<210> 4387
<211> 304
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095f03b1

<400> 4387

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tgacgcataa gatcgtgatc gcggtgcaga tggggagcag caggtgccgg tccaaggcgc 120

tggcgctggt ggcggccacg ccgggggtgg actcggtggc gctggccggg gacggcaagg 180

accaggtagt ggtcgtcggc cacggtgtcg actccgtcaa gcttaccagc gcgctgcgca 240

ggaaggtcgg acacgcggag ctgctgcagg tcggtgacgc caaggaggac gggaagaagc 300

cggt 304

<210> 4388
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095f07b1

<400> 4388

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ggccgagacg ctggtgtgga tcaagggtga cacaagcgaa cttcgcctcg ccaaggaagc 120

gctcgagacg atgtgctttg tgctgccgcc ccttgcgcgc tgtgacgtgc tctcgtccaa 180

gtttgacaac cttgaggaac tcgtgagcca aggcaagagc ccgagccagg catgccacgc 240

gatcagcctg tgtgacgcgg cgtttgtgga gaaacccgcc ccttcgaacc gcattgatga 300

tctcgtcgag gagcagtaaa cttcagatcg acgtgtcgct ccatggatga agtggtggcg 360

gccttcctag cttgcttttt tccacgttaa 390

<210> 4389

<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g01b1

<400> 4389

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ttggcgctca ttagggtggt cactatcatc atcgcggagt caatcttcaa attggaaatg 120

ttttccttcg tttcgttctt ttttttatag agggaagatc tggctttaaa gaagaagaat 180

tcctgcacct gtccatgcaa tacaaaaagg gcgtcccgtg gtagtgttgt tgaaccgcta 240

atagcaaaat tcactccgtt actgtaatta gaacccaatg ccttcagata agggctcaga 300

tagcttatgt ttaagctttc acctggatat attttggtca ttcatggacc 350

<210> 4390
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g05b1

<400> 4390

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gatggccagc aagtgggtca ggcccgaggt gtacccgctg ttcgcggcga cgggcgtggc 120

catcggcatc tgcgccttta gcctccttcg caacatcacc ggcaacccag aagtcagggt 180

caacaagatg gggagggcag cgggagtgct tgagaaccat gaggagggca ggcgctacgc 240

cgagcacggc ctcagagcct atgtgcagga caagaccccc gagatcatgc caggaatcaa 300

caagttcttc accagcccaa aatgaagcac tttagtctgt ctgtgactcg caattagtaa 360

ctgttgtggt caagtgcaaa cctatttcaa gcattcagta atgttgttgc gtccataatt 420

cagaggacat cgtcaattac ctcttattgg aagaaccatg tgatgtttga t 471

<210> 4391
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g07b1

<400> 4391

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agatgtcggg ccgcggcaag ggaggcaagg gactcggcaa gggcggcgcc aagcgccacc 120

ggaaggtgct ccgcgacaac atccagggca tcaccaagcc ggcgatccgt cgtctggcgc 180

ggcggggcgg cgtgaagcgc atctcgggtc tcatctacga ggagacccgc ggcgtgctca 240

agatcttcct cgagaacgtc atccgtgacg ccgtcaccta caccgagcac gcccgccgaa 300

agaccgttac cgtacatgga cgtcgtgtac tcgctcaagc gctaatggcg cacccttac 360

ggatggccag gctaggccgc caccagatta gctagcctgt gtctagggt 409

<210> 4392
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g09b1

<400> 4392

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tgtagatgga caagatatca gccggattag cagatggctc gcgtcacttc ccaacctaca 180

catgttgttt ttcaacggtc cgaagataga gcagcaggat attgagatga ttggattgat 240

acccaatctg atcgatttgt tgctgccttt acacaaaaca gacgacgctg ggcggctcat 300

catcaggcgt gaaggatttc aacagttgca gagtttccgg gtatacaata ctcgtatggg 360

aagtttaatg tttgaaccgg gggctatgcc gaggctcaag gagcttgaac tccggaactt 420

tatcgaaagg cccaaatctg ctgaggtcga tcttgacttt 460

<210> 4393
<211> 64
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095g10b1

<400> 4393

cttttgttca tatgccagcc agtgtgaaat aaaggatcat tttgcccttа catgtctgac 60

caaa 64

<210> 4394
<211> 86
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h01b1

<400> 4394

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaa 86

<210> 4395
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h04b1

<400> 4395

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaataa aaaaaaaaaa 120

aaaaggggggg gcccgtttta ggggacccaa tttaacttcc cgggctaggc accttaatat 180

ttttttttttg gggcccctaa aataaattta tggggccgcg ttttaccacc ggtggat 237

<210> 4396
<211> 478
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316095h11b1

<400> 4396

ttggttggtc aattgaagtg actattaaag ttgtgaagac agaatttcat actggtagac 60

ttatttttgtc cttttcgccc caattagctc agactactat tacaaattct aatacaaact 120

atgttcatcg tgagatagtc gatctacgtg atggctctga gtttgtgatt aaagtgcctt 180

attgctacaa ctctatgtac atggatactg accaagctca aaatgattta ttcatgatga 240

tgcaggtcaa tgtattaaat gaattggtag ctccagacac ttgcgcacaa agcgtagaaa 300

ttttgtatga ggttaggggt ggagtagaca tggaatttca agttccagtt cctttcaatg 360

ttgtaccagt tcaacagata gttcctcaga gtggtggaga aggccaagct gagttagttc 420

ttgattcttg aattggtagt tccactgtgc atgacccgtc taagatgtct tgctgagc 478

<210> 4397
<211> 59
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096a01b1

<400> 4397

acgcctacgc taccgcccac gcgtccgccc acgcgtgcgc ccacgcattc acccacgcg 59

<210> 4398
<211> 477
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316096a06b1

<400> 4398

cttattcgtc cgtaccccga ttccccttcc cctgtgcgat cgatactctc tagggttcat 60

cggcggtcac accaagcaag gatgactact tcaaggcgtc ttgctgacag gaagagtgcg 120

aagtttcaga agaacgtcac aaagaggggc tcagtgcctg aaactactgt gaagaagggg 180

aatgactatc ctgttggacc tatcgtgctt ggattcttca tctttgaggt cataggatca 240

tccttgtttc agattatcag gacggctact agtggtggga tggcttaata tcaagctgaa 300

aacaagacga tcattatcag agatttattt tatccatgtg tctgggaggc aatatcatat 360

ctgtaccctg tagcaaactt caaccctgat gatgctatga ggagatttaa atcttgcgca 420

gngagagttt acctnctgtt actaanaacc taggctaaac tagaaactaa atggtgc 477

<210> 4399
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096a08b1

<400> 4399

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gggaatcgat gcggtgctaa ggagtacacg cgcagcgcga ggcgatggag gagtcatggg 180

tcgatgcatt tcttgtttgc ttcgtgcacg cagctacaca cccgcggcac cgagcgtggc 240

cggtggccgc tggcctgcat ttcgtttcct ctgaatccct ttttcacgga gcgatcggtc 300

atagtacatc gatcattcgg gatgtaaatg tttctggaaa ggatggagga ctaatccata 360

atacctaaat agttgaaccc attacttta aaaaaaaaaa agaacaaaac gatcgtcctt 420

accaaca 427

<210> 4400
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096a09b1

<400> 4400

tcgcctacgc gtccgggagg gttgtgtata tatcttgtct gttctttgat atgtatggca 60

gaccattata tatgtaacag attattctgg agttatttat ttcatattat atttaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaagg aactaactta acaaggaaac aaaaatacac acgaaagaaa gacaaactag 240

tactctttgt ggggggcccc cttaagggaa ctaactggca cctcctttaa aatcgccact 300

t 301

<210> 4401
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096a11b1

<400> 4401

ctcggtttaa tgcaattgca aatcgtctac ttagcaaggt ctactttaca tacaaaaaat 60

gtatatgaag gagcaatata tgtgcaaaag gatagcagca gagcacttct ttggctgttg 120

gaaaaatggg caccaagctt aaggatttac acaattttct caaacaagta atcaatctat 180

ctatgtatct atcacaaaaa aaaaaaaaac aagagactg 219

<210> 4402
<211> 470
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096b04b1

<400> 4402

cctcacgcgt ccggcaagtg aacggtggac accagtgcac acagttgaga gtatagtttt 60

gagcattatt tcgatgctct ctagtccaaa cgatgagtct ccagcaaata ttgaagcggc 120

taaggactgg agagaaaaga gggccgaatt caagaaaaag gtgaggagcc ttgttcgcaa 180

atctcaggaa atgctctgaa aaaggaggat catccggggg agtccacaag cgctgcaatt 240

ctcttgcttt caccaaatgg ggcacctgat gccagcactt gaacttctcc cctgtttatt 300

ttccgttcag cgtcggtcga aggctgttgt tggtcttgtc tctccgagac actcggggtg 360

ctgcctatta tgaactctcg attttattgt ggcatggagt tggtcaatgt caagaagtat 420

tttcgtgtga tgccacttaa tcgtagttat cggcggggac cccacaaaaa 470

<210> 4403
<211> 498
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316096b06b1

<400> 4403

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gaccggccaa agcaagcagg tcaccatggg cggcgggcac gacatgcacg gcggccacag 120

cggcggagtg aagggcttcg tgtccagcct cgtcggcggc ggcaaaagcc acgggtacgg 180

cggccagggg cacggttgcg accagggcta cggcggccac gggcagcagc agcacgggta 240

cggcggccac gtgcagcagc acgggtacgg cagccatggg cagcagcagg ggtacggcgg 300

ccacggccag cacgggtacc ctccgcccgc cgccggtgct tgcccccgt acggcggcta 360

cccggcgcaa ggctacgcgc cggcggcgta ccccgcgcag cccgcgccac accacggtgg 420

gcaatgggat cgtanacacc ggcactgcgg cgggccgggc acgctactcc gcgggagcac 480

atgggcggtg caagcacg 498

<210> 4404
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096b11b1

<400> 4404

gctgcacgcc tgcggtccgt ccggaattcc ggtcaccacg cgttcttcac gcgtccgccc 60

acgcgtccga tcgagcgagc caacaactcg cagccaccac aatttcgaaa tacctcctgc 120

ctgcctgcaa gaaacgagcg ccgagaaaga aatggaggcg gcggtcggcg gcagctggac 180

acgcgtgcgt acgctcggcc gcggcgcgtc cggcgccgtg gtgtccctcg ccgccgacga 240

cctctcgggc gcgctcttcg ccgtcaagtc ggcgccc 277

<210> 4405
<211> 248
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096b12b1

<400> 4405

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tgatttatca ttatcaggtg gtctgggtct gtttttagtc cagtagactg tggtgttgct 120

gttacattca tggtcactat gtcacagggg ggcacactgt gccaccagta atgtcgaatt 180

gtttttgagt tttggcacac tttaagatcg ttttgtcagc gcaatgaaat ctacctcata 240

gataaata 248

<210> 4406
<211> 487
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c03b1

<400> 4406

cattcataca tcgacggcca agctagccct cggcggagca aggagggccg gagactgatc 60

agtttgatat ggcgatcagg aacgtgacgg cggcgacccg gtcgctggac ggtgacatga 120

cggtggacga gttcaaggag tggctccggc ggttcgacgt ggaccgcgac ggccgcatca 180

gccgcgacga gctgcggtgc gcgatgcgca ccatccggac gcgcttctcg gggtacaaga 240

gcaagcgcgg catcgagtac gccgacgccg acggcgacgg ctacgtcgac gacggcgagg 300

tggacgggct catcgagtac gcgcagaaga gcctcgggct caggatcgtc gcctactgag 360

aggagtctag ctaggtctct attaagcgaa gctagctcca tatctaccca tgcatgctag 420

aataagcgct gatctatcgt ttgctactgc cctgtacctt tgctttcttg tctacttatt 480

ggctaat 487

<210> 4407
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c04b1

<400> 4407

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gcgtccgccg cgcggaaccg ctcctcccac ctggccagca gcggcgtcct cgccgggtcg 120

atcagccggc gcccgatgat cttgtcgatc gcgccgaacc agccgaggta gccgccaagc 180

acgacgtcga cgaacccgat ggcgtcgccg ccgaagaacg ccttcccctt ggagcactcc 240

gcgaacgcgc cctccagggt ctccagcgcc gccacggccc gggacaccgc ctgcgcccgc 300

tcctcctccg tcttgcacga gaagagcata cccgttcacg ccgacccgac cttgtcgtag 360

acgaacgccg cccagaagcg cgccgtggcg cgccgtaagg ggtctccccc ctaccgtct 419

<210> 4408
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c06b1

<400> 4408

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aagcttgttc tcaggaggga gaagagcaga gctgcgggga cattttcgtg tgacttggcc 120

ggttacttct cgacgtcgtc cagctgccag aggctgtccg gtaaagtcgc cgtgatcacc 180

ggcgcggcca gcggcatcgg caaggcgacg gccgtcgagt tcatccggaa cggcgccaag 240

gtcatcctcg cggacatcca ggacgacgcg ggccgctccg tggcggccga gctcggcccg 300

gtcgcggagt acacccgctg cgacgtgacc gacgaggcgc atatcgcccg ggcggtggac 360

ttcgccgtgg tccgccacgg ccggctcgac gtactgtaca gcaacgc 407

<210> 4409
<211> 82
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c09b1

<400> 4409

tcggtttaaa aaagcataga aaagagggag ggatatgaga aaataaaata aaagggaaga 60

aagaagaaaa agtcgtgcga gg 82

<210> 4410
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c11b1

<400> 4410

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cctgcgccct catgctcttc ctcttgtcat ggttgacctt cctcgtcgca gcggcgtgtt 120

cgctggctgg atcagtccgt aatgcatacc acacccggta caggggggatc ttcaacggtg 180

acccgctctc ttgcgagacg ctgcgcaagg gcgtcttcgc tgccggtgca gccttcacct 240

tcttcacggc catcctcagc gagttctact acatcagcta ctccaaatcc cgggatgccg 300

ccggcggcgc tccatacggc ggctccagca tcggcatggg cccttataat taaggagctt 360

ggttctggag gtttatggaa aggttcagtc cgtttcactt tcagggcgga tcatgcatat 420

gtag 424

<210> 4411

<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096c12b1

<400> 4411

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catagatcga tgcctgctca gtccaccgct gtcatctact accactgtcg gcgacgtttg 120

tcccgttagt ttgagaagat ggattgttgc gcgcgcagta tgtttatgtc tatgagtttt 180

gtgtcacttt gtacccaaag atatgttttg taagctggta attcttgtga atatgatttg 240

attacttttc ttgaaataaa aaaggaactt gataacacaa aacctaaaca ttaaacatgg 300

acgaaaatat acaacaaaaa gactg 325

<210> 4412
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096d09b1

<400> 4412

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caggtctctc ttgtcattaa ttacgatctc cccaacaatc gtgagcttta catccatcgt 120

attggtcgct ctgggcgttt tgggcgcaag ggtgtggcga tcaactttgt gcgcaaggat 180

gacatccgta tccttcggga catcgagcag tactacagca cgcagatcga cgagatgccc 240

atgaacgtcg ctgatcttat ctgagctctg gaccggatca atccctcccc tctctttgtc 300

tcggtgcgat gtttggggaa tttggttgcg ttgcgatgtt tggatgtatt tctggtgctg 360

caacttgaga tttcttttgt tgcttttggg aacatgggaa gtgtatatat tctttctcgg 420

attgaccacc agctcatgta aaacactctt ttggtgttac gctattttct gattcggacg 480

ccatgacaga c 491

<210> 4413
<211> 249
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096d10b1

<400> 4413

tctcttacgc gtccgcccac gcgtccgccc acgcgttcga ccacgcgtcc gtgctatttg 60

gtgaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aataaaaaaa 120

aaaaaaatat ataaaaaaaa aaaaaaaaaa aaaagaaaaa aaaaaaaaaa aaaaaaaaaa 180

aataaaaaaa aaaaaaaaaa caaaaaaaaa agccggctgc cttttaaaaa aaaaaaaatt 240

tttctctcg 249

<210> 4414
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096e01b1

<400> 4414

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cgacagcatc ctctcagtcc ttagcttcct tccctcgccg ccacccacca aggaaaggag 120

gatgtcttgc tgcggcggca actgcgggtg cggcgccagc tgaagtgcgg caacggctgc 180

ggcgggtgca agatgttccc cgacgtggag gccaccgccg gcgccgccgc catggtcatg 240

cccaccgcct cccacaaggg gagctccggc gggttcgaga cgggcggaga gaccggcggc 300

tgcgactgca ccacctgcaa gtgcggcacc gcgtgcggct gctcctgctg cagctgcaac 360

tgagccggcg cccaggaggc cggccggcag aggcgagcac gaggatgagg aggacaagca 420

agcaagcacc atcaccacca gtttaccacc acccagcgta tcatcaccag ccgccgcatg 480

cgctcgcggg cgcgcgc 497

<210> 4415
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096e08b1

<400> 4415

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gcggcggtag cggaggctac ggcggcggcg gcggtggcta cggcggccag ggcggcggcg 120

gctacggcca gggaggcggt ggcggctacg gccagggcgg cggtggctac ggcggccagc 180

gcggtggcgg cggctacggc ggcggcggcg gcggctacgg cggcggcggt ggtggctacg 240

gcggccagcg tggtggcggt gactccggcg gccagtggag gaactgagcg gcggggccct 300

ccagttatcg atctatctac catctcgtcg tcttcgtcag caagttatct tcagttcctg 360

tgtcagtcag tctgagtcgt cgtgtgtgtc gttgagtcct gtggtgtttt tgatcgcgag 420

ctcgagtgtc gcttctgccg gggttaatca gagctgggta cgcgaggaag aaac 474

<210> 4416
<211> 492
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f01b1

<400> 4416

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agctgcctgc aacgcaatgg agacgttgct tgttcataaa gatcttatga agactccaga 120

actcaatgac atactagtag cactcaagac agcaggagtt aatctttatt gtgggcctgt 180

tgcgcataaa gtattgggct acccaaaagc agattcatta catctggagt acagttctat 240

ggcttgcaca gttgagatag ttgatgatgt acaatcagca attgaccata tacatcgcta 300

tggaagtgca catacagact gtgtggtcac tacagatgat aaagtagcag agacctttct 360

acgtcaagtt gatagtgctg ccgtattata caacgcgagt acaagattct ccgatggtgc 420

tcgttttgga ctcggtgctg aggttggcat aagtacaggc cgtatacatg cacgtggacc 480

tgtgggtgtt ga 492

<210> 4417
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f07b1

<400> 4417

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tgagcagcat ggatgtatgc gaccgtggct cgttgttgtg cctgatagaa gaaccggccc 120

gactgaggtt gtgtgcactg ctaaaccaag agacccgagg gaggatatgt gagctgcctt 180

gacgcttggc atacaagagg agaaaatgca aggcctgcgg aatggcatct catggaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaac aaaaaacaaa aataaacacc cactctacca 300

acgggggggg cccttctaaa ggacccaact caccttccgg ggggggccac tcccaaggtt 360

ccaatt 366

<210> 4418
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096f08b1

<400> 4418

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gcggaggccg ccaagatgga cctcctcgag gacgacgacg agttcgagga gttcgagatc 180

gaccaagaat gggatgacaa ggaagatggc aacgaagctg tccagcaatg ggaggatgac 240

tgggatgatg acgacgtgaa caacgacttc ttactgcagc cgtggaaaga agctggtggg 300

cggtttcccc caaccgagct gcccctcttc cccc 334

<210> 4419
<211> 498
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g07b1

<400> 4419

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gcgagatggt gtacatcaag aaccagaaga caagggcgta ctccaagcgt ttccaagtca 120

agttcaagag aaggcgccag ggcaagactg actacagggc caggctgagg ctcacaaacc 180

aggacaagaa caagtacaac actcctaagt accgttttgt tgtgcgattt accaacaagg 240

atgtcactgc acaaattgtt tatgctacca ttgctggtga tattgtgatg gccgctgcct 300

actcccatga gttgcctcgc tatggtcttg aagttggcct caccaactat gctgcagctt 360

actgcactgg tctgcttttg gctcgtcgtg tgcttaagaa ccgtgatctt gatgaggagt 420

atgaaggcaa tgttgaggcc actgctgagg acttctctgt tgagccttct gatgagagga 480

ggccttttcg tgcgctct 498

<210> 4420
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g08b1

<400> 4420

tcgcccacgc gtccgacgcg ctgctctcgg cggcggcgcc accaccggcc ctctcgtcgt 60

cgctgcagtc gccgtcgccg acggaggttt cgtcctcggg ccaccgctcc cggtcggcct 120

cctcgtagaa ccccagcacc atgttcgaca ggctcatctc gtcgccggcc tccgccacaa 180

ccatttcctc gtgcttggtt gtaaatctgg tgtgcgtggc tcacgttgct ccgtggtcag 240

ctgcagggtc cttcccgccg gcttgtatac ccggagacgc ggcggacgtg gcgaggcggc 300

aatggatggt acggtgctcg cgggacccgc gcggagtgga tgaggcagtt ccagatggcg 360

tgggcccccc ggt 373

<210> 4421
<211> 496
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g09b1

<400> 4421

gctgaaggtg gtgaagggca acccgaaccc gcgcagctac tacaagtgca ccaccgtggg 60

gtgccccgtg cggaagcacg tggagcgcgc gtcccacgac ctgcgcgccg tgatcaccac 120

gtacgagggc aagcacaacc acgacgtgcc ggccgccagg gggagcgccg cgctctaccg 180

ccccgcgccc cgggcggcgg acagcaccgt gagcaccggc cactacctta acccgcagcc 240

gtccgccatg gcgtaccaaa ccagcacggg aggccccaac gtcgccgccg ccgggacgca 300

gcagtacgcg ccgaggcccg acgggttcgg cggccagaac cagggctcgt tcggcttcaa 360

cggcagcttc ggcttctccg ggcccgggtt cgacaacccg acggcgtcgt acatgagcca 420

gcaccagcag cagcagaggc agaacgacgc gatgcacgcg tcgagcgcca aggaggagcc 480

gagggaggag gacatg 496

<210> 4422
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096g11b1

<400> 4422

tctgttcttg gccccagaaa tcatcaaagg cgaaggccat ggaagtgcgg tcgactggtg 60

gacctttggt atcttcttgc acgagcttct atacggcaag acaccattca aggggtcagg 120

caaccgcgcc acgctgttca acgtggtcgg tcagcagcta aagttccccg agtcgccgtc 180

gacgagctac gctggcaggg acctcatcag ggggctcctg gccaaggagc cgcagcagcg 240

cctcggcgtg aagaggggcg cgacggagat aaagcagcac ccgttctttg agggcgtgaa 300

ctgggctctc atccggtgca gcacgccccc agaggtcccg aggcccgttg aggcggagct 360

gcccatgaag tacggggtgt cggaggcagt cgcgagcacc aacaagaggg tggtcggcgc 420

ggacgccaag tccggtggga agtaccttga ctctgagttc ttttagagtt tgcgccttaa 480

cggcagatcc 490

<210> 4423
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h02b1

<400> 4423

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tgccgatcaa gatgaatgct gtggaaggtg ccgccgtgtg ggaataagcg agtggtgcat 120

gtaccactta tgtggggcac tagtgactcc atggaggtgc caccatgtga tgcgtgcttg 180

tggaaatatg tttctataag catgtaatgt ttcgtctgtg ttaacgtgaa aatggatatc 240

ggtacggaaa aaataaa 257

<210> 4424
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h06b1

<400> 4424

gtttcgcgtc cgttcctcct gcccttcttc caggggtctc cgaatatgaa gttgaggatc 60

gctctattca ttctggcttc gttcaccgct cacggccacc caagcgccga accgggcact 120

gccgcgtttg gttcttactt caccactgtc attcgtgttc cccacggctg cactggctca 180

tctaccacaa aggttgacgt taagataagc gaggacatat ctcatgtcaa agcacacaga 240

gtacccggtt ggaagctgga tgtcgtctat cgagacaacg acaacgccac cgctctaaag 300

ttgggcgaaa acagaaccgt tgataccctg acctggacag cactaactga agccgactat 360

ctccccgata acatgttcga ggacttcggc gtcaatatga agcttccaca gccttctgca 420

atgaaaatcg tttaccttcc gaccactcaa acgtgtggaa acggaacgag cgcttgggta 480

ggaattcct 489

<210> 4425
<211> 210
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h08b1

<400> 4425

gggccggtcc ggaatcccct tttcgaccaa cccactagac ttcgtttcat caagagaacc 60

cacgcctgag ggcaggggtg atttgaaagc atagctggtg taccacacca accaaagtga 120

gttcacgggc cgacaattga caacgacatg accgggaaaa cccatcggct accaaagtaa 180

aaggccttga cgaaaagaca actgtttgcc 210

<210> 4426
<211> 486
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h10b1

<400> 4426

ttggtcttgc gaacagggta gctgacgcga gaggtgggga tggcgtcacg attcctgggc 60

cgatccaaaa ccctagctct cgccctctcc cgcgcggatg cggcgccggc gcccctggct 120

ggatcccgcg cgctctcctc cctcccgcgc caccccgcca ccgccgcccc gtccccggcg 180

attggatccc ctcctggcct cagcaagggt ctgggacatg agccaacatc acacctcagc 240

ggcacacaat ttttaccggg ttgggtttct actgtagcat ccaatggatc tcccatgcag 300

aatacacagg tctcagagac atgcaagcca gttgctggaa cgggacactc tgatgcacta 360

aaagcgactg aaggagcctt ccctaaattc acggcattca gcccactaga agcagctgct 420

aaacctagaa gcagtccgtt gacaagtgaa agttctaaag tcaggcgatc agagatatta 480

acagga 486

<210> 4427
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316096h12b1

<400> 4427

ttgttcaccc ccctcaccct ctctaatatg cttccacaca aatttacaaa gcatggccct 60

tcgtacacat tttatatcta ttacggactc catcaacaat tataaaccga tttcccccac 120

tcccgtctgt actagtacat ctttacccta tatctcaggc taacttctca ccaaacaata 180

cctgtcactc cctgcgacat atcctataga ctaattctct atctctaggc ctaaccacgt 240

tactgtacgc gttttatcaa cattccta 268

<210> 4428
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097a01b1

<400> 4428

gatcatatac tccatctact gtagaaggtg tggatgttaa tgaggaatct gatggcattg 60

cccaggatga atttgaatgt cctgactcag aattctatga atttacagaa ataaggtcga 120

ttcagaagtt ctaacctggg cagatctggg ctctctatag tgatatggac aagttcccca 180

attactatgc catcataaag aaagtcgatc tcaagaataa taaagtacaa gtgaaatggc 240

cttgatctct gtcctcgggg agaggaagag aaaagattga ctggtaaaa 289

<210> 4429
<211> 285
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097a08b1

<400> 4429

gtctcagacc ctgtcggacg cgagcaagca ggcgtacatg cgtggcaaga gggtcctgga 60

gatcaacccc aggcacccca tcatcaagga gctccgtgac aaggtcgccc aggacagcga 120

tagcgagggt ctgaagcaga cggcgaggct ggtgtaccag acggcgctga tggagagcgg 180

gttcaacctg ccggacccca aggactttgc ctcgagcatc taccggtcgg tgcagaagag 240

cttggacctg agccccgacg cggccgtgga ggtggaagag gaggt 285

<210> 4430
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097a09b1

<400> 4430

tttacgcgtc cgaggatctc atactagatt acgttaacca gctgtgcaac cgtctgccaa 60

gccccatggg agaatcagct gtggactgtg ccagccttgg atccatgcct gacattgagt 120

tcaccattag tggcaagaag tttgcgctga aaccagaaga gtatatcctg aaggttggcg 180

aaggagctgc tgcccagtgc atcagtggat tcacagccat ggacatcccg cctcctcgcg 240

gtcctctctg gatcctggga gacgttttca tgggccccta ccacaccgtc ttcgactacg 300

gcaagctgcg tgtcggattc gccaaggcgg cctgaaaggg tggtcgagcg agcgccccac 360

cgcggaggcg aacacttgcg ccgggagaga gcttagcttt tttactccga atttgaccgg 420

tgctgtgtgt gtatatatat gctacatgct tgttttcaaa gaccctgaca tgaccaaggg 480

tt 482

<210> 4431
<211> 216
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097a10b1

<400> 4431

tttcgatcgg tctagatatg catcaacatt aatacggcta aataagtgga ggagcacttg 60

aaaggtctta ttgttgttgt atgatttgaa cgtgtgtcta tctcattaat ctatcgttga 120

acgatagtat gtatgtatac tggacgtgta aggagggcaa aagtgcctta agcgtcccat 180

gatttaatat tttaagttgt gagtttgtta ttgccc 216

<210> 4432
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097b01b1

<400> 4432

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tcggacgtgg agttcgtgtg ccatgacctc catggcaccc atggccgaca agacgggacc 180

ctcggcctcg gccatggccg cctgctcggg agatggggtc gccatgtttg acgccgccag 240

cgcctcatgg acctcagctc caggtccacc gccatcgaac tcaggtggat aagtggatgg 300

cacatgtgta tgttgctgtt gagggattat attcgacatt ttatttttat cccaacacta 360

gattgaagtg gtggttcaca aaggattctt agtggggcac aagtgtagat tgatacaaaa 420

gcatgctgaa tattttggtc cttcaggttc attttcacga tcatttttt agtgcaaaat 480

ttt 483

<210> 4433
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097b06b1

<400> 4433

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cagaggacct gacatccatt cttgagtcag ttggttgtga aattgacaat gagaagatgg 180

aactcatgct gtcccaagtg aagggcaagg acatcaccga gctcttggct gctggtaggc 240

agaagcttgc tgcggttcca tctg 264

<210> 4434
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097b08b1

<400> 4434

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggccccccctc 180

ctaaagaacc caaactaaac tccctttcca ccccactcca aaacctttta aaaggggccc 240

caaaattaaa ttccccgccc ctctttcaac ccaaccagaa cgggaaaacc ccgggcttac 300

cccacataaa acccccttaat cacaaccccc cctctcacag ttgcaaaaat attaaaaagg 360

cccccacctc ccccctttcc aaacatattt acccccctaaa agccaaaaga acccccccct 420

tcaaa 425

<210> 4435
<211> 64
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097b09b1

<400> 4435

ttatgaacac ttgtcatcag acagaaaaag gaagaaaata aacactgctg cgtgagctta 60

tgtc 64

<210> 4436

<211> 175
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097c02b1

<400> 4436

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ctttgatatt aagacagatg ttggtcgact gagaatctaa agatggtcaa cttgctattt 120

aaaaaaaaaa aaaataaaaa aaaataaaaa aaaaaaaaaa aaaaaaaata aatat 175

<210> 4437
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097c03b1

<400> 4437

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tcgacgactg cggcctctgc tgcgtgacct actggtgccc gtgcatcacg ttcggcaagg 180

tggcggagat cgtggaccgg gggtcgacgt cgtgcgggac gagcggcgcg ctctacgcgc 240

tcctgtgctt gctcacgggc tgccagtgga tctactcctg cacctaccgc tccaagatgc 300

gcgcccagta cgcgcttccg gacgggcccc tgttcgattg ctgtgtccac ttctgcttgc 360

gagccgtgcg ctcttgtcca gcagtacaag 390

<210> 4438
<211> 154
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097c05b1

<400> 4438

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agagggtcac gggaaccgtg acgctgtcca acactaccaa ggggttcggc cttcatctct 120

cctgactact gttgcgagga cctctttgtt cacc 154

<210> 4439
<211> 58
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097c07b1

<400> 4439

ctcactacat gctgtatttc atgctgagga ttaggcatta tagttatgat tatggcca 58

<210> 4440
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097d02b1

<400> 4440

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ctccggcgtg tgcgccaagc gcgtggtggt ggacgcccgc caccacatgc tcggccgcct 120

ggcctcgatc gtcgccaagg agctgctcaa cgggcagcgc gtggtggtgg tcccatgcga 180

ggagatctgc atgtccggcg gcctcgtccg ccagaagatg aagtacctcc gcttcctccg 240

caagaggatg aacaccaagc ccttccacgg tcccatccac ttccgcgccc cggtcaagat 300

cctctggcgc accatccgcg gtatgattcc gcacaagacc gcgaggggcg aggccgcgct 360

tgccaggctc aaggcgtacg agggcgtgcc gcctccgtac gacaggacca agcgcatggt 420

catccccgac gcgctcaagg ttctgag 447

<210> 4441
<211> 440
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316097d03b1

<400> 4441

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tcgtacaggg atgcgacgcg tccgtgcttc tggacgcggc gccgggcagc aaggcggaga 120

aggacgcgct ggcgaacaag agcctgcgcg ggttcgaggt gatcgacaag atcaaggaca 180

ccctcgaggc tcagtgcccc ggcgtcgtca cctgcgccga catcctcgcg ctggcggcca 240

gggacgccgt gctcatggtc gggggccccc actacgacgt gcctcagggc cggcgcgacg 300

ggagacgctc cgtcgacacc gacacgctga ccgggctccc gtcgccgttc ctcaacgcct 360

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ccggcgggca cactctgggc 440

<210> 4442
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097d04b1

<400> 4442

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cagcgacagc gacagcgacg tgttcgccgt gccggagatc acgtcgccgc cggccaagcg 180

ggcgcggccg tcgtcgttct ggtgcctgtg agccagctag cgcggcggca aaccacccac 240

gccgtcgcag caaccgggcg agctacgtac ctgtggctcg atcgatccat cactagtgta 300

atctttgctc gttccccgca aaaaaaataa ataaataaaa aaatgctcgt tgtagcttgg 360

tgtgaaaaaa aaaaaaattt aaatttc 387

<210> 4443
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097d09b1

<400> 4443

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ctccacccac cagctccacg gcatcttcga agctgcgagc tttggcggag cgaacatcga 180

cccggcggcg tgggaggaca agaagtgcaa cggcgagtcc cgcttccctg cacaggtgag 240

ggtggccaca aggaagatct gcgacccgct ggaggaggac gccttccgcc cgatcctgca 300

ccactacgac gggcccaagt tccggctgga gctcagcatc accgaggccc tctcccttct 360

cgatatattt gaagacaagg acgaggcctg atcgaggctg catgcctact gctgatcagg 420

gagggactgt tgaggaagga acaacgcaat aagatcgatc ggagcatata tatatacata 480

catacatacg attaatatca ttatc 505

<210> 4444
<211> 496
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097d12b1

<400> 4444

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ggggacggac cccctgtcgc agatgttcct cgagccgccc tacttcccca gcctcgacgc 180

cgtcaagacg ttcttggccg actactgggt tcagcacatg gccgccgcct ctgttccgtc 240

agggcgcagc tgaaagtttg gaacggccaa ataccgccgc tagatgggtt gccacttgcc 300

acggcgacga cccgtgattt tgctggctag aagttacagt acctatgatc cccagcctgc 360

aatcatatag tgattcattt cagtagcggt agacgagtac atatactcag acatgtgtgt 420

gttgtgacta gtggtgccat ctgttctagt gttctattac agagtttttc atcggagatc 480

catttcattt tttttc 496

<210> 4445
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097e08b1

<400> 4445

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gcgcctacac caccgcctcc ggctccaact tcaacggctt ctccacctcg gacatcaaga 120

cctacttggc ctactccagc tgatatggaa ctagtcatgt ggccacgtac tacgtagcac 180

acgccattcg atttgttttc gcagtacaca aaatgaagag ctgtaattaa gctcgtacaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataaa aaaaaaaaaa 300

aaaaaaaaat aaaaaaaaaa aatcttttat aaaacataaa t 341

<210> 4446
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097e12b1

<400> 4446

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gatatcagaa aggatctgta tggtaatgtt gttctcagtg gaggttctac catgtttcct 180

ggaattgctg atcgcatgag caaggagatc acggcccttg ctcctagcag tatgaaggtt 240

aaagttattg caccacctga aaggaaatac agtgtctgga tcggtggctc tattttggcc 300

tctcttagca ctttccagca gatgtggatc tccaaggcag agtacgacga gtctggtccc 360

ggcattgccc acatgaagtg cttctgaaga gtcggggaag gtcgtttaca aaggggactt 420

<210> 4447
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f01b1

<400> 4447

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tgtgttgttg agtaacgctt ctaagattct aattaacttt tgg 223

<210> 4448
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f04b1

<400> 4448

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aacaagacgc tgctcaagag cgacgccctc tacacctaca tcctcgacac caccgtcttc 120

ccccgtgagc acgagtgcat gcgcgacctg cgcctcatca ccgacaagca cccatggggc 180

tacatgcagt cgtcgtcgga cgaggcacag ctgctgggga tgctgatcaa gatggcgggc 240

gccaagaaga cgatcgaggt gggcgtgttc acgggctact cgctgctggc caccgcgctg 300

gcgctcccgg aggacggcaa ggtggtggcc atcgacaccg accgcgagtg ctacgaggtg 360

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ggcctggcgc gcctggacga gctgctcgtc caggacc 457

<210> 4449
<211> 56
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f06b1

<400> 4449

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<210> 4450
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f07b1

<400> 4450

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gaggaacgat atggttgagt acttcggtga gcagctctct ggtttcacat tcactgccaa 120

tggctgggtg caatcttatg gatcaaggtg tgtcaagcca ccgattatct acggtgatgt 180

gagccgcccc aaccccatga ctgtgttctg gtccaagatg gcacagagca tgactgctcg 240

cccaatgaag ggaatgttga caggccctgt cacaatcctt aactggtctt ttgttagaaa 300

tgaccaaccg aggtttgaga cttgctacca gattgctctt gcaatcaaga aggaggtcga 360

ggaccttgag gctggtggta ttcaggtcat ccaaattgac gaggctgctt tgagagaggg 420

tctgccactc cgcaagtctg agcatgcttt ctacttggac t 461

<210> 4451
<211> 274
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f08b1

<400> 4451

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ccgatcaaga atttctttta cttcgacgac gctgatggta aaggggccat ggaggacatc 120

cccccaactc ctgaagactg aatcacgtga tacgtactcc cttcgttcca aaatagatga 180

cctaacttta ttttagatcg gtgggagtaa ctcttcattc gacatggctc gctgataact 240

tgtcccaatc atttgaactg atcactgtta gaac 274

<210> 4452
<211> 51
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097f11b1

<400> 4452

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<210> 4453
<211> 313
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097g01b1

<400> 4453

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ggtcggaacc tgttttcagt catgatgatg atgatatata tctcctaaat aattcattgg 180

caatattatg aacctatgcc acagcttatg tctattacct accctagttt gtggtctctg 240

ttgtcctggg agtatttcct tgtattgatg ttggaattac cttcatggca gtgggtttat 300

aaatatggag ttt 313

<210> 4454
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097g03b1

<400> 4454

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gcaagtcaag gcggtcgtca ccgcgcttaa gaaccccgcg tggttgtgag catagcgcac 120

tatggtcctc ttgacactcc ggagaacgtg aagactcgcg ataattgaat gaggagagga 180

agaagaagat gatgatgatg atgacaccaa cgaggatcac taataagccc ctgccttcat 240

gggcagccag ccaccgtctc taataaatat catatgtgat ttggtttcct ttgtcaaccg 300

cggcaagaca tatatgttgt agcaacatta tgtttattat cgcttgttgg agaagtctct 360

ggttgcagta aatctgtttt ttttttatca gttgttgaag ctaatggtgt tcactaccct 420

agttaattca tgccc 435

<210> 4455
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097g07b1

<400> 4455

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ccttctcaaa cacagctggt gtggctgacg tgcggtactc ctggctcaag gagattccca 180

ataccttccg gatgaagggc gtaacgatgc cgcgggactt cgtcgtctag gaacctgcat 240

gctgaagggc gctcccgccg tctagcttct ttgtgtagat aacagctgta acctgcgaaa 300

ggcaggtagt cagtcagttg tcagtcggtc caacctagct ctcaggctag caaactcttt 360

ttttttacc cttacccgtt cgtcggggtt gaaactatct catgtcgcct gtc 413

<210> 4456
<211> 295
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h01b1

<400> 4456

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tcgcgttcct cacccttgac gccgaagcca agtagtacgt gcgtgtgagt gtgatcatac 120

atgcatacgt acgtgcatgt gtttatgttt gtgtggtttg aatatttata cgtctacaaa 180

tgttacgtac gtacgtaaat aagcacacat tccggttaca tgtatccatg cggctctgtg 240

cagcgtgtaa atgtaatcat atatgttcta cgtccatgca aacatcttta ctttt 295

<210> 4457
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h02b1

<400> 4457

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gtgctgccaa tgtttttggc accatgattg catcttcact gatggacaag caagggagga 180

agagccttct cataacaagc ttttctggaa tggcggcgtc gatgttactc ttgtcattgt 240

ccttcacctg gaaggctttg gcaccttatt ctggcactct tgctgttgtt ggcactgtcc 300

tgtatgtgct gtcattcgct cttggagctg gccctgttcc agctttgctc cttcctgaaa 360

tatttgcctc cagaataagg gccaaggctg tagcattatc aatgggcatg cactgggtat 420

ccaacttttt catcggcctg tactttctga gcgttgtaac aagtttggaa tcagcaccgc 480

ggtcttggga t 491

<210> 4458
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h03b1

<400> 4458

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tgtggcttgt gccttgctgc tcctcgctgc ggggtgccag gccagccctt tctggccact 180

ggagatcggc tactaccacg acaagtgccc ccaagcggag gccgtcgtca agggcgtcat 240

ggagaaggcc atctcccaga accccggcaa tggcgctgcc atgatccgca tgctcttcca 300

tgactgtttc gtcgagggct gtgatgcttc cgtcctcctg gacccgactc cgttcagccc 360

gacgccggag aaactcagcc cgccgaacga cccttccctg cgcggcttcg agctgattga 420

cgccatcaag gacgccctcg aggcgggctg cccggccgtc gt 462

<210> 4459
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h05b1

<400> 4459

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aaagaaatga aaaatgaaat agaaataaga aaaaaattta aaaaataaga aaaggtgaaa 120

agaaaaagaa aaaattgaaa gagaaaaatt aagataaaaa aaatagaaaa tgaaagtaaa 180

aaaaaaaaaa ataaaaaaga aaaataaaaa agataaaaaa aaaaaaaaaa aaaaaattaa 240

aaaaaaataa ataaaaaata taaaatgaaa gataaaaaat aaatataaaa aaaaaaatag 300

aaaaaaataa taataataaa aagaataata taaaaaaaaa aatattaaaa taaaaaaaaa 360

atataaaaat aagtaaaaag agataaataa taaaaatt 398

<210> 4460
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h09b1

<400> 4460

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gcccacccac acgtcaagtg caccgtgctg gatctcccca aggtgatcga aaaaactcca 180

tccgactgcg tagtcaacta tgttgccggt gacctttttcc acaccgtccc aaaggcccag 240

gcagtgatgc tcaagcttgt gctgcaccac tggagtgacg acgattgtgt gaagatccta 300

acccagtgta agaatgccat tccttcccgt gaggaaggag ggaaggctga ttgtcattga 360

cattgtggtt gaaccatcac taggacctgt catgtctgag gcccagactc tcatggactt 420

gctcatgctt gtctcaccag aggccgtcca cgtagcgaaa atgactggcg tgatattttc 480

atg 483

<210> 4461
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h10b1

<400> 4461

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gcgtcaagaa gccccaccgc ttccgccccg gcaccgtcgc gctccgcgag atccgcaagt 180

accagaagag caccgagctg ctcatccgca agctcccctt ccagcgcctc gtccgcgaga 240

tcgcccagga cttcaagacc gacctccgct tccagtcctc cgccgtctcc gccctgcagg 300

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ccaagcgcgt caccatcatg cccaaggaca tccagctcgc ccg 403

<210> 4462
<211> 506
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316097h12b1

<400> 4462

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accatcgacc tcgccaagga cccctacttc atgcgaaacc atctcggcag ctatgagtgc 180

aagctctgcc tgacgctcca caacaacgag gggaactacc tcgcgcacac gcaggggaag 240

cggcaccaga ccaacctcgc caagcgtgcc gcccgcgagg ccaaggacgc gcccgcgcag 300

ccccagccaa acaagcgcaa gctcgcgccc cgcaaatctg ttaagattgg cagacctgga 360

tatacagtaa ctaaacagta tgatcccgac acgaagcaac actcatttct ctttgagatt 420

gagtatcctg aaatcgaaga taatagcaag cccaggcacc gtttcatggc atcatatgaa 480

cagaaaatcc aatcttggga taagag 506

<210> 4463
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a01b1

<400> 4463

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tcgccagggt cgccctccag agcgacgatg tcgagctcgt cgccgtcaac gaccccttta 180

tcaccaccga gtacatgacc tacatgttca agtacgacac cgttcacggc cactggaagc 240

acagtgacat caagctcaag gacgacaaga cgctgctctt tggcgagaag ccagttaccg 300

tcttcggcgt caggaaccct gaggagatcc cgtggggtga ggctggtgcc gattacgttg 360

tggagtccac cggtgtcttc actgacaagg acaaggccgc tgctcacttg aa 412

<210> 4464
<211> 508
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a03b1

<400> 4464

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cacggcctct cacaccaccg cggcgcgttc tccggtccgg gcgaggcgcg tgtccatccc 180

gccgtcgacg tcgtactcac cgagcttgcc cgcggagaag agcaagagcc cagggaagct 240

gagctggagg cggtcgcgga gcctgacccc gactcacgcc cggacaccga cgccgcagag 300

aagctgtttc atggcgagga ggaggaagag gcggcgaatg cgtggaaggt gaagatgcta 360

ggaggttccg ccacggcatc cgattgcacc accgccacca tcttcgccac caccaggagc 420

aggacgggga ggaacacgac taccgccagc aggacaaggt tgattgcgcg agcatgagcc 480

tgttcggacg ctttcaccac cgccacca 508

<210> 4465
<211> 173
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a05b1

<400> 4465

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acatctctaa ctacttttca gtgaatattg gcgacctggt atttaccggt acgacaaaaa 120

gagaacaaga aaacacggta aaaaaagaaa agtgacaata tattacacac acc 173

<210> 4466
<211> 283
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a09b1

<400> 4466

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cggccaagtg aagtcctttt ctttttcttg tgttgtgtta tgagtcatgt gggaggttat 120

tgtcgcgtag ttgaataaaa agaaagagtc ggaaaagaga tacatatagg gttaatacgt 180

cgcaaaccat tatctcttcg gtgaattgag catagcacag ttttttaaaa aaaaaaaaaa 240

ataaataata aactaaaaat ataaaaaaat attaaacaat aag 283

<210> 4467
<211> 512
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a10b1

<400> 4467

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tcgtccggcg gcaagctctt caccctggag gaggtcgcca agcacagctc caaggacgac 120

tgctggctag tcatcggcgg caaggtgtac aatgtgacca agtttctcga tgaccaccct 180

ggaggcgacg acgtcttgct gtcttcaaca gccaaggatg cgaccgacga cttcgaggac 240

gtggggcaca gcacgaccgc ccgggcgatg atggacgagt cctacgtggg cgagatcgac 300

gcgaccacga tacccaccaa ggtcaagtac acgccgtcca agcagccgca ctacaaccag 360

gacaagaccc ccgagttcgt catcaagatc ctccagatct tggtcccccc cgcgatactg 420

ggcctggccg tcgccgtacg gatctacacc aaggcggagt ctgtctagca ccgtccgctt 480

ataccagtca gtcagtcagt cattcggaag tg 512

<210> 4468
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098a11b1

<400> 4468

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aggtgctccg tgacaacatc cagggcatca ccaagccggc tatccgtcgt ctggcgctgc 180

gtggcggacc gaatcgcatc tggggtctca tctacgagga gacccgcaga gctctcacta 240

tctttctcaa gaacgacata cgagactgcg taacctacac ctagcacgcg cgccgcaaga 300

ccgttcacaa catggacgtt tggtacgccc tcaagcgcca gggactcacc ctctacggat 360

t 361

<210> 4469
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b02b1

<400> 4469

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gactattaaa gttgtgaaga cagaatttca tactggtaga cttattttgt ccttttcgcc 240

ccaattagct cagactacta ttacaaattc taatacaaac tatgttcatc gtgagatagt 300

cgatctacgt gatggctctg agtttgtgat taaagtgcct tattgctaca actctatgta 360

catggatact gaccaagctc aaaatgattt attcatgatg atgcaggtca atgtattaaa 420

tgaattggta gctccagaca cttgcgcaca aagcgtagaa attttgtatg ag 472

<210> 4470
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b05b1

<400> 4470

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caggctcgtc agctgggcac cgcaggtgga ggtgctcgcc caccctgcgg taggcgcctt 180

catcacgcac agcggctgga actccacggt ggaagccgtg tcggagggcg tgccgatgat 240

atgcctcccg ttgcacggag accagttcag caacgccagg tacgtgtgcg atgtctggaa 300

ggtgggagct ggagatcgag gcgtcgtcgg cggctgggca gaacctggag agagggaaga 360

tcaaggctgc catcgacaag attgtgcacg acatagggac tagagagagg atggttgccc 420

tcaaattagc tgcagatgaa gcagctaacc tccaaactga ggtgaaagct ttgggt 476

<210> 4471
<211> 266
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b06b1

<400> 4471

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agggggattt ttaaacctat cggcccaaac caactcaccg cagatatctg cccgctcccc 120

ctccggaaca ccagcccctc tgcacaggac ctgacatcca tgaggactca gccggaggtg 180

aaacggacaa cgagaacagg gaactgaggc agacccaagc caagggcaag gacctcaccg 240

agccctagga tgctggtacg gagaag 266

<210> 4472
<211> 57
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b07b1

<400> 4472

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<210> 4473
<211> 204
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098b09b1

<400> 4473

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aaaaaaaaac aaaacaaaaa tgtaaaaaaa caaaaacaaa aaagaacaaa ttaagcaaaa 180

taaaaaaaaa aaaaaagacg ataa 204

<210> 4474
<211> 504
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098c02b1

<400> 4474

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accaagtttt tcatgttgaa gcccgtggag atgtattcaa gatctctgct gtatggatgc 120

gtatggacaa aggttctgca tatccttgtg tgaaaattgt ctgcagcagc gcgaaggtgg 180

tgctgaagaa agcgtagcgt gttagttcca agtgaagaaa atgtggcgca acacgaagtg 240

ctctgtgcca tggtaaataa ttgttcagtt ctgtatttgg agcagggtgg gggttgattc 300

tgagaatcag aattcactac aaagatagga tcttgatttt tgttggttta aaacagaaaa 360

tggaaaggaa aaaaagggaa ccaaaagttt tttatgttcg tgaaaaatgc aggcttttat 420

ttagcacatg cagtcttgta tttcatgtat gccgatgtta cttggcatca caatctctat 480

gataccattt aatactttag ttat 504

<210> 4475
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098c04b1

<400> 4475

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gatatgtgca ggcgcggcag cggaaattac agcaggtgcc ggcaccaccg ctagtgccgt 180

tgccaaatcc taacccgcag ccagacccaa acccacaacc tttgcctatg ccagacccaa 240

atccacagcc attaccgcag cctttaccgc aaccactgcc aggcccaaac ccgtagccac 300

aaccattacc ttagcctctg ccgcgcccaa acctgcagcc acaacctctg ccacaaccgt 360

tgcctgacgc aaacccacag ccaccgccat taccacaacc tctgccacga ccactaccgg 420

ggccaaacgc acagcctcta ccacaaccac tgccaggccc aaacccaccg tcactgcctc 480

aaccagacgt ccaaggctca tatccgcagg tagaacc 517

<210> 4476
<211> 311
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098c12b1

<400> 4476

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aaacaaaaaa caaaaaaaaa gaaaaaaagc gggcagccgg ctataatggc cctcctgtgc 120

gcccgggtcc ctgctgacgg cgtgcctgtc gtctgaggcc ccttgtttgc ccgcccgcgc 180

tctgtgtgta cacctgtgtg ccggggaaac cccttgcctg gcccaagaaa agctggttcc 240

ctacttgtcg cctttctgca ggtggctctt gggcacgcgg gccctacggt tgccctttcc 300

cacctgttgc c 311

<210> 4477
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d02b1

<400> 4477

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gagtcagtgt acagccggcc tatgagatcc tttttgctga atccacgcag ataagcacaa 120

tggcggcgcc ggcgatgttt gctaaggcga ccaggaaggc ctacgtggtc ggtcggccgc 180

ggcggttgct gcggctggcg gtgctctggg cgcggaaggt gagcgcggcg cagagcctcc 240

gcctgctcaa gacgctgcag cacagccagg tcgtcggcct cagactgggt cacggcggcc 300

ggggcaacga ccggctgcac tacggagagc gagagctctc catcgacgag acgccggcgt 360

ttcggttccg aacccccctcc gcgcgcgtgc tccggttcat accatgcatg gagcgctccg 420

tcctcgacac ccc 433

<210> 4478
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d04b1

<400> 4478

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ctttttgtac agctagagaa gcaaaacaac ccagccagcc atagctcgta gtggtggtgt 120

gttgtgggga gagcgactcg cctgacctga cctgttgcgc ctggtggtgt gctctgaagt 180

tgtaacgaca ccaccgcccg aaatcatatg gcaaagttgt tgccttgcta gttggcattc 240

atcccccaga ttaccggccc tttatgccct gcaaaatggt tctccttagt tttttcctgg 300

gttgtatctt gt 312

<210> 4479
<211> 416
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316098d06b1

<400> 4479

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gatgtcgccg ttcgtggcgc gcgcgctgct gtgcctggag gaggccggcg tcgagtacga 120

gctcgtcccc atgagccgcg aggccggcga ccaccgccag ccggacttcc tcgcccgaaa 180

ccccttcggc caggtccccg ttctcgagga cggcgacctc accatcttcg aatcgcgcgc 240

cgtcgcgagg cacgtgctgc gcaagcacaa gccggaattg ctgggctccg gctcgccgga 300

gtcggcggcg atggtggatg tgtggttgga ggcgngaggc ccaccagcac cagaccccgg 360

cgggcaccat cgtgatgcag tgcattctta ccccgtttct tggttgccag cgcgac 416

<210> 4480
<211> 244
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d09b1

<400> 4480

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ctgagatgat ttactgaaac agcctgctcc atcgtcagac ttcatcctcg agtaatttgg 180

aattcggtat caaacgtgtg tgtcttggat gcacaatctg ctttaatggc tttgacaatc 240

aatt 244

<210> 4481
<211> 498
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d10b1

<400> 4481

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ccgtctcact cgcaagtcac agcatccccc gtctgctatc tcttgggaga gttgggagcg 120

gaggagcgac gcaggccgac gcagcggcgc aggcgagcaa aggccgcgag gcagcaaggc 180

gccctccggc tgaagagcag cgattcagac agcgacatcg tgcctcttgt cgactatctc 240

aacacccagt actatggggt catcggcctc ggcacgccgc cgcagaattt cacggtgata 300

ttcgacaccg ggagctccaa cctgtgggtt ccctcgtcga aatgctattt ctcgatagca 360

tgctacctcc accccaaata caagtcgagc aagtcaagca cttacaaagc agatggtgag 420

atttgcaaaa tcacatatgg ctctggcgca atctctggat ttttcagcaa tgataatgtg 480

ttggctgggg accttgtt 498

<210> 4482
<211> 212
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d11b1

<400> 4482

tctgaatgca cacgaaaatt acaggacggt taactcaacg aaggaggacc ggaaggtttc 60

tgggaatgca actggggtgt tgtcctggga tagccccctt acataataat tgtaatcccc 120

tctgtgctgt tcatctacac ttgttcttcc tgggcgtgcc agggacgtaa aatttctttt 180

ggttatatga tgcccatagt tttcacatgc ct 212

<210> 4483
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098d12b1

<400> 4483

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ggtctatgtg cagcctgcag ctcaaggaat aggtcgagtg gcactcgcac ttgcttgccg 120

gtgctgattt ttctgaactg taatgcgtta tgtatgaaca acttctcgtc ttttgtcttt 180

gtaatatgta ccggtgtaca tttgtttgct tcagtagacg tatacacaaa cctggaagca 240

ggcagaggtt ttcttt 256

<210> 4484
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098e01b1

<400> 4484

tttgtttgta acctttctcc cttggttttg gaggtgcacg caccaactcg atgcaggggg 60

acgccatgga gcaagtcgag ttcgtggaac aagtcatgga cgatgccatg gaagatcatg 120

attcagagag tactacgacg acatcccgca atctaggatt cgaagatagc agtcgtgcga 180

gataggagtt atcctggtca gctgttcttg tgggaatgga gtcccatcaa cgttggagat 240

ccacgagtca ctttcatcat ccaccactag agatacttgt tatattcatt tgacctttgt 300

ggtcttgtac tcaatttctt gtaatttgac ccataggccg tgcgcccgtg gctgacactt 360

gagttgtccc attcgcaagt gtgcgatgga agactccgct agcttataaa ggaagccttg 420

cccaacttag caaa 434

<210> 4485
<211> 302
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098e08b1

<400> 4485

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gcagcccagg cagctcaacg tccgccgcca cgatgtggag ctccggctcc gacctcgacg 120

agtccgcctc gacggcgacg gcggccaccg catgctccct gcagccgcag acgccgcctc 180

cgcctcgccg ccgccgcagc cgcaaccgcc gccgcgccca gcgccgggtc aagaacggcc 240

ccgaggtgga ggagtctgag gcggaggcgg agcaggtgtg gtgcggctcg cactgggagg 300

cg 302

<210> 4486
<211> 503
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098e10b1

<400> 4486

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gcgaggaggg accatggcgt cgttgccaga ggaggaggag gccttcgagc acacgctgct 120

ggtggtgcgc gaggtgtcgg tgttcaagat cccgccgcgc accaccagcg gcggctacaa 180

gtgcggcgag tggctgcaga cggacaagat ctggacgggc cgcctccgcg tggtgtcgtg 240

cggcgaccgc tgcgagatcc ggctcgagga cccgggctcc ggggacctct tcgccgcctg 300

cttcgtgctg cccggccaga gggacagcgc cgtcgagacc gtgctcgact cgtcgcgcta 360

cttcgtgctc cgcatcgagg acggcagggg gaagcatgcc ttcgtcggcc tgtgcttcgg 420

cgagcgcaat gaggccttcg acttcaacgt ggccctgtcg gatcacgaga cgtatgtcaa 480

gagggagcaa gatcaggaga ccg 503

<210> 4487
<211> 250
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098f02b1

<400> 4487

gtttttcatg gagcccaaca aggtgtacaa gggggactac tacaagcact ctggcctgta 60

ctacaagatg actgacacga agcatgcagc tgctcagaca gatactacta aggagatgac 120

tacagccatg tcaacaacga agaacaagac tgatagcatg acccacaaga ctaccatgag 180

cactgagatg cgcaagatgg ccaaggcgat caccaacgat gtcaagaaca actactgcag 240

gacctactag 250

<210> 4488
<211> 511
<212> DNA

<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098f04b1

<400> 4488

gtttatatgc ttagattgcg agggtcgtgg agaggcgcca tgtcctactt gcaatgctgg 60

tcagcagcat gggttttaca aagcaaatca aatgactcgg tgcagtatat gtcatggcag 120

gggtttgctt gctcaccaag atggatctga ttcggtatgt gggatgtgca atggtcaagg 180

aatgttgccc tgcatagcat gtgcatcccg gggcctagtg acatgccaga catgtaatgg 240

ctgcggttcc cttcttgcac aaagcactgc tcatgttcga tggaagacgc ttacagcaag 300

gaaagttagt gcaacaacag gagctgcttc tgtccctgac gaagttttcc acagagcgca 360

aggggtgcaa ctatgcaaca tacaggctta ccaatgcact cctgctttct ttgccgattc 420

atacccactc aaccagttct cgtcggagat tgttgctagc cggctgccag ttccaccatc 480

tgcaagagtg atttcggaga ggcacatcat c 511

<210> 4489
<211> 505
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098f05b1

<400> 4489

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ttgcaggtcg agcaacttaa aagtgaaagt gcaaccctct tcaagcaact gacagaggca 120

aatcagcagt tcaccaccgc ggtcactgac aacaggatcc tcaaatcaga tgtagagacc 180

ttaagaatca aggtaaaaat ggcagaagac atggtggcta gaggcgcagt gtcatgcggc 240

ctaggacagc agctcggatt ggcaccattt ctgaactcca ggaagatgtg acaaagcctt 300

ggtgagcgtt ctcacaggca cagggttgaa cttgaaaggg aaccatgcac tcttcagagg 360

tttctagctc tagctcttca agttcagaca tcggcggtac gaagcactgc aagtctagag 420

tgctcgaata accggatgcc cgcttgccca gcgaggcggc cagatgtgtg gatgccgtgt 480

ggcccggaga ttcacaccaa agcag 505

<210> 4490

<211> 508
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: uC-tsro9316098f10b1

<400> 4490

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ccgtggtggc tgacgtctcg gcgcagaaca ccccgcagga cttcgtcaac ctgcacaacc 120

gcgcccgcgc cgtggacggt gtcggcccgg tggcgtggga caacaacgtg gccaggtttg 180

cgcaggactg ggcggcgcag cgcgccggcg attgccggct ccagcactcc ggcgggccgt 240

tcggcgagaa catcttctgg ggttccgggc agtcgtggac ggccgccgac gcggtgaagc 300

tgtgggtgga cgagaagcag aactaccatc ttgacagcaa cacctgcgac gccggcaagg 360

tgtgcgggca ctacacgcag gtggtgtggc gcaagtcgac ccgcatcggc tgcgcgcgcg 420

tggtctgcgc cgggaaccgg ggcgtcttca tcacctgcaa ctacaaccnc ccgggcaact 480

tcaacggcga gcgcccgttc gcgttcct 508

<210> 4491
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g03b1

<400> 4491

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gcggctgagc gcggcggcgc gcctccgcgg cgggcacggc gacggcggtg gccgctggac 120

gacgcccggc cacgaggtgc ggcccaaggg gtacccgatg aaccgcacgc cgccgccgcc 180

gggcgagtcg cgcaagtggg aggactggga gctcccctgc tacgtcacct ccttcctcac 240

cgtcgtcatc ctcggcgtcg ggctcaacgc caagcccgac ctcaccctcg agacctgggc 300

gcaccacaag gcgctcgagc gcctccagca gcaggagctc gccgccgcgt tcgccttcga 360

cgacgccctg gcagagtgat ccgcgcgcgg gcgccccagg tcttcctcga aacctaggtt 420

gcttct 426

<210> 4492
<211> 336
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g04b1

<400> 4492

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gtttccacga tgaaactgat cgctgcctac ctcctcgcct atgttggtgg gaactcttcc 120

caagtgccgc tgatgtcaag aacatcctgg actcagttgg tgctgaggct gatgaagaaa 180

agcttgagtt gcttcctgct gaactgaaag gcaaggacat cacagaagtg attgcatctg 240

gaagggagaa gtttgccgct gtgccttcag gtgggaggtg ccattgctgt gggagctcca 300

gttgctgcat ttgacgagcg cgcggcacct gctgct 336

<210> 4493
<211> 226
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g07b1

<400> 4493

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cgtggcgagc catgatggtg gtcaatgttt caatgggcac acagaagcat agaagctatt 120

tgcaattttt gtgtcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ataaaa 226

<210> 4494
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g08b1

<400> 4494

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acaagatgga cggcggcagg cggcggcagc aggcggcgcg cgcctcgtgg atcgtggacg 180

acgccaccgg gctggcggtg gcggaggtga agaggaagct gacggcgact ggggtgtccc 240

tgggcgagga cgtgctgacg ctggtggtgg agcccaacgt ggaccactcg ctcatcatgg 300

ggctccttgt ggtgcatggt cttattaacc acttcatgtg agcattgcat ttgtcgtgca 360

gggacagggt gtaattttct tgttagatgc atgcttagat gcatttatcc t 411

<210> 4495
<211> 145
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g11b1

<400> 4495

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ctatcggcag aactaaggtg atggttattc tgctgtttgt tgttgatctg taactttgta 120

agaccatcaa gtctgggatt tgagg 145

<210> 4496
<211> 489
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098g12b1

<400> 4496

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ccacagacat gtgaggaagg cagtagcgaa gcagctaaag gaattcagga aacactatga 120

aggctatgta ccattggact acaaggttta cttgaagaaa atgaaaagat ctggggaatg 180

gggagatcat gtgaccttac aagcggctgc agaccggttt ggtgccaaaa tctgcttgct 240

gacatcgttt agagacacat gcctgatcga gatagtcccc agggatgccg ctcctacaag 300

agctaaatac ttggtgctca tcgaaccccg tcaccttctg cagagctttg gctaagtttc 360

tggtgtgaag tacactacaa ttccttgtat gccaatgaag atcttccgac tcgcaagacc 420

aaaaagaagc actggctgtt ctaggtaggg ttcgccggtc gttggattca ccactccccc 480

ctgattctt 489

<210> 4497
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098h02b1

<400> 4497

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tctgacgatg gcttgccccc tctggaagag aacatgaacc acttggacct cagcgagggc 180

gaagaaagcg aagaggaaag tgaaactgaa aacgaaggga ttaccgacgc aaaatgatgg 240

ttgtttgtct gatcgaaata agatccaggt ctcttgaggt ttttatcgtg gatctgaaaa 300

caatctatct ctgtacactt gtattgcttg cttgcgtcgt gtaccagtca tatgtatttt 360

tcttttgagg gattcgtgta tcagatcagt atatgtaagt gtagactgta aacagggtca 420

gtctctgaga acaccagtgc ttttatttag actaatac 458

<210> 4498
<211> 490
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098h06b1

<400> 4498

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gagatggacc ccgactcagt ggcgaaggcg ttcgtcgagc actactaccg cacgttcgac 120

accaaccggg cggcgctggt ggggctgtac caggagggct ccatgctctc cttcgagggc 180

gagaagttcc agggagccgc cgccatcgcc accaagctca cctccctccc cttcaccaag 240

tgcgcccaca ccgtcgtcac tgtcgactgc cagcccgccg gccccacggg cggcatgctc 300

gtcttcgtct ccggatccct ccaagtcgac ggcgagcacc acatcaagtt ctcccagatg 360

ttccacttga tgccaatcgg accagggaac ttctatgtgc acaacgacat gttccgcctg 420

aactacggct aagaatctta ccaaaggtcg tgcttcccca tggaagacag aatgttcttg 480

caaacaaaca 490

<210> 4499
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316098h12b1

<400> 4499

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gaactttgcg atcgttgttt gatgttttta ttgctgttgc tatacatctg taccaacttt 120

gcttgatttg taacatgcaa atagtcgctt cggtcgaaga ggttaggatt atatatttct 180

gtgtctgcct catgcttgcc agcttttatc tacattgaga acgagttacc tatctgcgtc 240

tgggacaaaa tgtcaatgat ttagcagcag attatgtact atgaattgga actccatagt 300

ggtattctca tcagcttgaa t 321

<210> 4500
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099a01b1

<400> 4500

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ggatcaacgt gaatcgtcga taaccaacat tccgcgcatg tggctcaatg gaggtactgg 180

gacacccctc aagcactgga agacaagttc ggcggattct taaataggca gattgtagat 240

gattacaaac aatttcgccg aggtgtgctt taagaacttc tgcgacaggg tgaagaacag 300

ggtcaccttt aacgagccac atacatattg tggtttctcc tacggagagg ggattcatgc 360

tcctgggagg tgctcgccgg ggatggattg tgccgtccca aaggagactc gttcgagagc 420

catacactgt tgggcaccaa catatct 447

<210> 4501
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099a02b1

<400> 4501

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accttgtaag aggtacccag ccccccctggg catatagcga tgggtatgtc gctaaactat 180

gaagtgtgta tgtatggaga gaggcgtggt gcttcttaaa taggcagatt ggagctgatt 240

acaaacaatt ctccgaggtg tgctttaaga acttcggcga cagggtgaag aactggttca 300

cctttaacga gccacataca tattgttgtt tctcctacgg agaggggatt catgcttctg 360

ggaggtgctt cccggagatg gatagtgccg ttccagaagg agattcgctt agagagccat 420

acactgcttg gcaccacatc tctctagctc atgctga 457

<210> 4502
<211> 378
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099a04b1

<400> 4502

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaacaa aaaggggggg gccgttttag 120

gggacccaag tttactaccc ggggcaggca acgaaaaagc ttttttttgg ggcccccaaa 180

atcaaattaa cgggccgggt tttaaaaacg tgggaccggg aaaacccctg gggtacccaa 240

actaaatcgc ttggaaaaaa acccccttt cgccggtggg ggaaaaacaa aaagggcccc 300

aaccaatcgc ctttccaaaa agttgccaac cttaaagggc aaagggaacc ccccttgtag 360

ggggacataa accgcggg 378

<210> 4503
<211> 517
<212> DNA
<213> Triticum aestivum

<223> Clone ID: uC-tsro9316099a07b1

<400> 4503

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gctgatcaac tcgctgatag ataacgacat agtgccatat gttacaattt ggcactggga 180

caccctcaa gcactggaag acaagtacgg cggcttctta ataggcaga ttgtagatga 240

ttacaaacaa ttcgccgagg tgtgctttaa gaacttcggt gacagggtga agaactggtt 300

caccttaac gagccacata catattgttg tttctcctac ggagagggga ttcatgctcc 360

tgggaggtgc tcgccgggga tggattgtgc cgtcccagaa ggagactcgc tcagagagcc 420

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tcgttacaac atgcatggag attccaaaat aggaatg 517

<210> 4504
<211> 331
<212> DNA
<213> Triticum aestivum

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